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ABSTRACT

The results of nearly 2 years of inquiry into the effectiveness of Catholic schools are summarized. Using a design combining field and survey research, the study included: interviews with staff, students, and parents; observations of classroom and general school life; and extensive documentation on seven Catholic schools across the nation. An introduction presents a brief review of prior research on effective schools, particularly the research of James Coleman and Andrew Greeley. Sections 1-5 focus on Catholic secondary schools, including their character (section 1), curriculum and academic organization (section 2), the character of instruction (section 3), and faculty roles and concerns (section 4). Based on an analysis of data from a national survey on American secondary schools, "High School and Beyond," section 5 discusses: major differences among Catholic schools as well as how these schools compare as a group to public schools; institutional factors associated with quality secondary schools; the effects of Catholic secondary schools on student achievement, post-secondary educational plans, and affective and social development; and findings from research on the effects of Catholic school education. Although the study focuses on secondary schools, some attention is given to elementary schools in section 6. Sections 7 and 8 deal with finance and governance issues facing Catholic schools. Using summary statements and numerous tables, findings are highlighted throughout the report. (LH)

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EFFECTIVE CATHOLIC SCHOOLS: AN EXPLORATION

EFFECTIVE CATHOLIC SCHOOLS: AN EXPLORATION

With a Special Focus on Catholic Secondary Schools

A Report Published by

National Center for Research in Total Catholic Education

Sponsored by the department of

Chief Administrators of Catholic Education (CACE)
of the
National Catholic Educational Association (NCEA)

Executive Summary

1984

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Mr. Bryk coordinated the conceptualization and design of this research. He was a major contributor to all sections.

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Mr. Carriedo conducted field research. He contributed to the writing of Sections 3 and 4.

FOREWORD

The Department of Chief Administrators of Catholic Education (CACE) of the National Catholic Educational Association (NCEA) established a National Center for Research in Total Catholic Education in 1978. It was to contract with organizations and individuals to perform research on topics in Catholic education. The Center was seen as a CACE service to its members because many are not able to support research due to staff and funding limitations. It is supported by contributions from dioceses, archdioceses, religious congregations and other interested parties who purchase certificates of interest in the Center. It is governed by a Board of Directors elected from among those purchasing certificates.

In early 1982, the Center Board met to develop a request for proposal. They decided to solicit proposals for "A Study of Effective Catholic Schools." This was to build upon the studies of James Coleman and colleagues and Andrew Greeley.

In brief, Coleman and colleagues found that students in Catholic schools have higher achievement scores and a greater opportunity to participate in the common school ideal than their public school counterparts. Greeley reported the benefits of Catholic education are strongest among disadvantaged minority youth.

Although that good news was and continues to be encouraging, the research indicated how little is known about how schools become effective. In an effort to remedy this, the Research Center, acting through its Board, awarded a contract to The Huron Institute of Cambridge, Massachusetts. The project was to look carefully at how Catholic schools are organized, the kinds of students they enroll, and the policies and procedures that characterize their operation.

The principal investigators for the project were:

Anthony S. Bryk
Associate Professor
Harvard Graduate School of Education
Senior Research Associate
Huron Institute

Peter B. Holland
Advanced Doctoral Candidate in
Administration, Planning, and Social
Policy
Harvard University

This *Executive Summary* reports on that investigation. It brings to fruition the dream of those who established the Center in 1978. Furthermore, it is an appropriate way to commemorate the centenary of the Third Plenary Council of Baltimore. At it, the American Bishops decreed, ". . . that near every church a parish school . . . is to be built and maintained. . . ."

On behalf of Catholic education in general and NCEA in particular, I want to thank those who cooperated with, supported, and conducted this research. The acknowledgments at the conclusion of this report name those who have been of particular assistance.

A special word of appreciation is due Tony Bryk and Peter Holland. They are to be commended for their cooperation, sensitivity, and integrity in bringing this project to completion. This *Executive Summary* is one of two documents prepared by them on the findings. The other is a technical report available through the NCEA Publication

Sales Office. Though the project was supported by the CACE Research Center, the opinions and judgments the investigators express in these documents do not necessarily reflect those of the Center membership.

It is the hope of the Research Center members that this project is the first of many. All will have as their ultimate purpose the invitation of the Scriptures to increase in wisdom before God. In doing this, Catholic education and Catholic educators strive to be more faithful to the vision of Jesus and their mission. This mission is summarized in the words of Pope John II in his 1979 talk to young people at Madison Square Garden in New York:

> I would like to tell you why the church considers it so important and expends so much energy in order to provide you and millions of other young people with a Catholic education. The answer can be summarized in one word, in one person, Jesus Christ. The church wants to communicate Christ to you. This is what education is all about, this is the meaning of life: to know Christ.

Bruno V. Manno
Director, Research and In-Service Programs
Staff to CACE Research Center Board
National Catholic Educational Association (NCEA)
Washington, D.C.
The Feast of the Resurrection, 1984

INTRODUCTION

This document summarizes the results of almost two years of inquiry into the effectiveness of Catholic schools. Although it focuses on Catholic secondary schools, some attention is given to elementary schools, particularly as they interact with their secondary school counterparts. It is a story of much goodness but also of some tensions and two deep-seated problems.

PRIOR RESEARCH ON EFFECTIVE SCHOOLS: A BRIEF REVIEW

Most reviews of school effects literature begin with *Equality of Educational Opportunity*, by James Coleman and others, published in 1966. It introduced what came to be called "input/output studies" of school effectiveness. It was one of the first nationwide surveys to measure both educational inputs, consisting of school, family, and student characteristics, and outputs, conceived primarily as academic achievement measured on standardized tests. This research and much of the work emerging from it developed from human capital theory. It suggests an investment in education can promote social reform. The focus on school resources such as staff/child ratio, salary schedules, and number of books in the library had a distinctly economic bent, as did the choice of the input/output model.

Educators were disappointed in the results of this early research. It suggested school achievement was determined mainly by family background rather than school characteristics. While these findings were subject to considerable debate, further analyses failed to yield substantially different conclusions.[1] One important and enduring consequence of Coleman's work, however, was a redefinition of the central educational issue: achieving equality in outcomes assumed priority over equal school inputs. Research gradually began to shift from scrutiny of educational resources toward the outcomes of education and the factors believed to influence those outcomes.

From the point of view of most professional educators, more resources are by definition highly desirable. However, resources are really only means for addressing the primary educational concerns: curriculum, the amount and quality of instruction, selection and maintenance of a talented and committed faculty, providing a positive climate to shape student life, and overall institutional leadership. As more recent educational research began to focus on these areas, certain attributes associated with effective public schools emerged. Further, these findings appear to be relatively consistent across diverse contexts and research methods.

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1. Numerous critiques and reanalyses followed the publication of *Equality of Educational Opportunity*. Washington, D.C., U.S. Office of Education, 1966. Two of the major contributions to this debate were: Moynihan, P., and Mosteller, F., *On Equality of Educational Opportunity*, New York: Random House, 1972; Jencks, C., *et al*., *Inequality: A Reassessment of the Effects of Family and Schooling in America*, New York: Random House, 1972; and Averch, H., *et al*., *How Effective is Schooling? A Critical Review and Synthesis of Research Findings*, Rand Corporation, 1971.

Ronald Edmonds' research on *Effective Schools for the Urban Poor*, and the work by Michael Rutter and others on a sample of secondary schools in London serving low-income students, are two of the most widely cited examples of this new stream of inquiry.[2] Edmonds suggests the key characteristics of successful schools are strong administrative leadership, an orderly school climate, teachers' high expectations, emphasis on basic skills, and frequent evaluation of students' progress. Edmonds embeds these findings within a more general argument: the failure of students to learn is due primarily to the school, and schools neither could nor should explain away failure by referring to cultural or social class deficit.

Rutter and others reach a similar conclusion. They argue that a constellation of factors—the amount of time spent on instruction, the presence of incentives and rewards for achievement, the ambiance of the classroom and school, and the opportunities for the students to exercise responsibility—create a particular ethos, or set of values, attitudes, and behavior, that characterizes effective schools.

It is only within the last three years that research on the effectiveness of Catholic schools appeared. James G. Cibulka and others reported in 1982 on an examination of *Inner-City Private Elementary Schools*, most of which were Catholic.[3] They conclude the effectiveness of these schools derives from strong institutional leadership, the shared values of the staff about the purposes of the school, a safe and orderly environment, and clarity of mission and purpose. Cibulka *et al.* gathered only limited data on student achievement, basing their conclusions primarily on parents' reports about school quality and their reasons for choosing a Catholic school.

Until publication of the book by Andrew Greeley, *Minority Students in Catholic Schools,* and the companion volume by James Coleman, Thomas Hoffer, and Sally Kilgore, *Public and Private Schools*, there was virtually no literature on the effects of Catholic secondary schools.[4] For this reason, their research proved both seminal and controversial.

Coleman *et al.* conclude that Catholic schools produce higher cognitive achievement than public schools; that they are less racially segregated; and that the variation across students in patterns of achievement is much less dependent upon family background. Greeley's results are even more powerful in some ways. Analyzing the same data base as Coleman *et al.*, Greeley claims large differences in the achievement of minority students in Catholic and in public schools. Further, these differences are greatest for the most disadvantaged youth—students from poor families, where parental education is limited, who are enrolled in a general program.

While Coleman *et al.* and Greeley report extensively on the effectiveness of Catholic secondary schools as compared to their public school counterparts, their results provide limited information about how these higher achievement levels are produced. Coleman *et al.* suggest that school policies on order and discipline, and features of school climate such as the amount of homework and absenteeism, play a major role. Greeley added to this list of explanatory factors the nature of the governance arrangement for the school and the quality of instruction as reported by

2. See Edmonds, R., "Effective Schools for the Urban Poor," *Educational Leadership*, April-May, 1981; and Rutter, M., *et al.*, *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*, Cambridge: Harvard University Press, 1979. Two other widely cited studies are: Brookover, W., *et al.*, *School Social Systems and Student Achievement: Schools Can Make a Difference*, New York: Prager, 1979; Weber, G., "Inner City Children Can Be Taught to Read: Four Successful Schools," Council for Basic Education, Occasional Papers No. 18, 1973.

3. See Cibulka, J., *et al.*, *Inner City Private Elementary Schools: A Study*, Milwaukee, Wisconsin: Marquette University Press, 1982.

4. Coleman, J., Hoffer, T., and Kilgore, S., *High School Achievement*, New York: Basic Books, 1982; Greeley, A., *Catholic High Schools and Minority Students*, New Brunswick, N.J.: Transaction, 1982.

students. Since a comparison of public and private schools was the primary focus of both studies, the educational variables examined were primarily those that differed between the two types of schools.

AIMS OF THIS RESEARCH

Despite the increasing volume of research on effective schools and the numerous recent reports on secondary school reform, Catholic schools remain virtually unexamined. Thus, our central research purpose was to identify the factors associated with the effectiveness of these schools through a broad exploration of their academic and social organization.

This raises a question: by what criteria should Catholic schools be judged? Student achievement has become the yardstick used by most researchers in evaluating the effectiveness of public schools. While we believe it important to look at student achievement and its causes, we also maintain this is not the only important aspect of schooling. School staff and parents tend to assess secondary schools in terms of a broad set of criteria that include organizational, social, and emotional objectives. For Catholic schools, one would have to add to this list a greater emphasis on value orientation and personal development. This represents a broader conception of effectiveness than we typically see in research on school effects.[5]

In brief, our aim has been to seek out the distinctive features of good Catholic schools. What matters about these schools both in terms of how a social scientist might view them and as the individuals closest to schools—teachers, students, and parents—perceive them? What makes them work? Can these features be preserved where they exist? Can they be replicated, transported elsewhere—to other Catholic schools, to any school?

STRUCTURE OF OUR INQUIRY

Several concerns pointed us in the direction of a field research approach. First, it was obvious that some aspects of school effectiveness that interested us would be difficult—some would argue impossible—to assess by quantitative means. Interviews and classroom observations might yield more productive data.

Second, as our literature review indicates, little is known about the subject of our inquiry. This uncertainty complicates the design of a quantitative study which requires explicit specification of the research questions at the outset. There is little opportunity for mid-course correction should you discover you asked the wrong questions—and there was a more than even chance we would make such mistakes. Here, too, field research seemed advantageous because of its flexibility. As the preliminary data analysis proceeded, subsequent investigation could be redirected.

Third, we judged it important that the study design allow ample opportunities for the subjects of our research—parents, students, and teachers in Catholic schools—to influence the content of that research. If this work was to have meaning for educators and parents, it should consider the aspects of their schools they regard as salient. We sought to ground our research on school effectiveness both in the existing educational research literature and in the experience of those most familiar with these schools.

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5. Sara Lawrence Lightfoot in her new book, *The Good High School*, New York: Basic Books, 1983, develops the idea of institutional goodness as the basis for a broader conceptualization of effective schools. We find this idea quite compatible, although our choice of research methods is somewhat different.

Nevertheless, exclusive reliance on a qualitative approach entails substantial problems. Some questions of interest to us could best be examined by traditional quantitative means. Identifying differing patterns of school achievement and the possible causes of these patterns falls in this realm. Further, there are some simple descriptive questions that survey research is ideally designed to answer: how large are Catholic schools, what percentage of students are enrolled in academic programs, how many mathematics courses do they take?

In addition, certain aspects of field research troubled us. How does one know the descriptive reports are valid and free of bias? Even if they are factual accounts, to what extent can we, or should we, generalize beyond this set of schools? A survey data base as a companion to a set of case studies could strengthen both the validity of the individual accounts and the ability to generalize overall field research findings.

Thus, we settled on a study design combining field and survey research. This technique is employed effectively by Edmonds and Rutter *et al.* Recent writings on social research methods generally support the efficacy of a multi-method approach.

Field Research

The field research sample consists of seven Catholic secondary schools selected from 5 archdioceses and 1 diocese: Boston, Baltimore, Cleveland, Louisville, San Antonio, and Los Angeles. In terms of Catholic school enrollment, each of these is among the twenty largest dioceses in the United States. As a set, they provide good geographic coverage of the areas with major concentrations of Catholic school.

We asked the superintendent of schools in each of these dioceses to nominate some "good schools that we might find interesting to visit." We described in some detail our broad definition of effective schools. Since we were interested in schools from different types of communities (urban, rural, and suburban) and with different mechanisms for school governance (religious order, diocesan, and parish or interparish), we asked each superintendent for nominations in each category. The superintendents suggested a varied group of schools, including some recommended for reasons other than high achievement. The superintendents also provided us with descriptive data about each school. This included tuition levels, percentage of graduates attending college, academic organization, whether coed or single-sex, school size, and estimates of the racial and social class composition of the student body.

In choosing the final set of schools, we sought maximum diversity so as to capture the range of contemporary Catholic education in America: poor schools and affluent schools; schools varying in size from 130 to over 1500; coed and single-sex schools; all-white, racially mixed, and an all-black school; schools where student enrollment is almost exclusively Catholic and schools where over forty-five percent are non-Catholic. We rejected some schools because they had a reputation as being academically elite within the system: we wanted good schools, but not just the best schools. A brief description of each school in the final secondary sample follows. As agreed beforehand, their actual names are not used to maintain confidentiality.

- *St. Richard's* is a coeducational diocesan high school in a middle-class suburb of Boston. Its student body of 900 is almost exclusively white. The curriculum is academic and college-preparatory. Approximately 80 percent of the graduates attend college each year.
- *St. Frances' High School* is a private inner-city girls' school in Baltimore. The curriculum emphasizes college preparation and entry-level employable skills. The student body of 540 is about one quarter black and comes largely from working-class families.

- *St. Cornelius'* is a coeducational diocesan high school serving low-income working-class families in urban Cleveland. Nearly 1000 students are spread over three campuses, requiring well-planned transportation schedules for students and teachers. Black and Hispanic students comprise approximately one quarter of the enrollment. About 65 percent of the graduates attend college. St. Cornelius' curriculum includes academic, vocational, business, and special education programs.
- *St. Madeline's High School* serves an almost exclusively black middle-class student body of 660 in Los Angeles. Ninety-two percent of the graduates attend college. Founded in 1889, St. Madeline's is a private, urban school for girls.
- *St. Edward's High School*, the largest school in our sample, enrolls 1500 students. A private boys' school in suburban Louisville, its student body is almost exclusively white and middle class. Founded in 1864, St. Edward's has a college-preparatory program that includes 12 advanced placement courses and a college attendance rate of 90 percent. Its tuition of $1450 is the second-highest in our sample.
- *St. Peter's* is a coeducational inter-parish high school located in inner-city San Antonio. Its population of 365 students from lower-income and working-class families is racially balanced, composed of almost equal numbers of Hispanics, blacks, and whites. St. Peter's features both an academic and a general curriculum. Its tuition of $900 is the lowest in our sample.
- *Bishop O'Boyle High School* is located in suburban, semi-rural Frederick County, Maryland. Originally founded as a parish high school in 1829, the school became private in 1972. The student body of 130 is upper middle class and 90 percent white, with 95 percent of the graduates attending college. The tuition of $1950 is the highest in our sample.

The field work was organized into two parts, conducted in the fall of 1982 and the spring of 1983. A team of two visited each school twice for a total of 10 to 12 person days. During the first round of visits, the team interviewed staff, students, and parents, observed classroom and general school life, and collected extensive documentation on each school. These activities addressed concerns within six broad areas: the school's philosophy and mission, curriculum and academic structure, school organization and staffing, student life within the school, finance and governance, and the Catholic character of the school.

We conceived the initial visits in broad terms, deliberately exploring a larger number of issues than we would eventually treat in the final report. The agenda was shaped by the existing research on effective schools, by our personal experience with Catholic schools, and by our previous professional endeavors in a variety of other contexts. We left ample opportunity at this point for those we were studying to influence our agenda. The primary purpose of this phase of our research was to develop a field-based set of hypotheses about the features of good Catholic schools. We looked for the visible signs, but we were also attentive to the unspoken and sometimes unrecognized aspects—the values that are shared, the conflicts that are sometimes hidden.

While an interpretative framework of this sort is useful as ideas are developing, it can be blinding if left unchecked by empirical evidence. The search for the latter was the main purpose of the second part of the field research and an auxiliary function of the survey research described below.

While the first part of the field research was exploratory, the second was highly structured. We returned to the schools in the spring of 1983 with 18 propositions embedded in six general themes. These themes provide the topical organization for the sections that follow. We developed a detailed data collection plan consisting of thematic and structured interviews, questionnaires, a classroom observation pro-

tocol, and procedures for document review. Every item in this data collection effort related to a proposition or set of propositions.

In the course of this work, we conducted approximately 350 interviews with principals, teachers, and other school staff; we observed in over 160 classrooms; we collected almost 2000 questionnaires from students, teachers, and parents. Taken together, this material provides an extensive empirical basis for our field research.

Survey Research: Analyses of *High School and Beyond*

Ideally, one might use case study results to design a follow-up quantitative inquiry in a larger set of randomly selected schools. This provides a rigorous test of the tenability of the general propositions formed in the field research and an opportunity to address those issues for which case study research is not well-suited. While we lacked the resources to undertake a survey of our own design, we were fortunate that a current large-scale national data collection effort by the National Center for Education Statistics (NCES), *High School and Beyond* (*HS&B*), included a random sample of Catholic secondary schools and contained data on a large number of questions of interest to us.

We drew the Catholic school sample from the *HS&B* tapes: 84 schools and 5495 students. We selected a large number of the questionnaire items for data analysis. Some of these were useful as they stood. Others were merged into composite factors. This process of constructing variables was guided by the research on school effects and by the propositions developed from the first part of the field research. The *HS&B* file contains extensive data on student and family background; school characteristics such as social composition, staffing, resources, and climate; students' attitudes and behavior as they relate to various aspects of schooling; and a broad array of outcome measures, including academic achievement, educational aspirations, and affective and social development. It represents our primary information source for Section 5 of this report and provides important supporting evidence for the other sections as well.

GUIDE TO THE EXECUTIVE SUMMARY

Each of the following sections parallels a section in the technical report. Using summary statements set in italics, we highlight our findings. We provide some elaboration on each statement and offer a glimpse of the empirical evidence that supports it.

Producing this manuscript has been a difficult task. We try to sketch in a few pages the complex nature of a set of social institutions and the characteristics of those who shape them. In doing this we identify common themes and unique features that contribute to the making of an effective school. We include excerpts of descriptive accounts from some schools in order to provide a brief look inside those schools. Unfortunately, the summary nature of this document precludes more extensive description. We encourage you to read the technical report.

Section 1
9 The Catholic Character of the Schools

Section 2
17 Curriculum and Academic Organization

Section 3
26 The Character of Instruction

Section 4
32 Faculty Roles and Concerns

Section 5
39 Student Life

THE CATHOLIC CHARACTER OF THE SCHOOLS

The obvious ways in which schools manifest their Catholic character involve specific religious activities such as liturgical services and a required religion curriculum. As we move beyond the visible features that mark a school as Catholic, it becomes necessary to examine the social and cultural fabric of the institution—the conflicts and the shared values, the explicit and the hidden. There are no simple procedures, however, for guiding this assessment. Thus, our objective remains modest: to describe certain features central to the Catholic character of the schools we visited, knowing that ours is at best a partial sketch of complex institutions.

The religion curriculum, liturgies, and special school activities, such as retreats and apostolic service programs, are the most visible ways in which Catholic schools differ from their public counterparts. Significant changes, however, have occurred in the last twenty years in the content, language, and pedagogy of religious instruction, and in the opportunities for religious experience.

The religion curriculum in the schools we visited generally consisted of three required full-year courses, and a choice of two semester electives in the senior year. Although we found some variation across schools in course titles, topics covered, textbooks used, and teaching methods employed, there were a number of similarities among the programs. A description of a typical curriculum follows.

Religion I: This course encourages students to examine and reflect on the meaning of their lives. In looking at their relationship to the world, students are asked to consider the role that faith and belief in a personal God might play within this context. This objective is addressed through study of the Old Testament as the expression of a community's wonder about God. Students are encouraged to think about their roles within the Catholic Church, their parish community, and society as a whole.

Religion II: This course might focus on the Christian person, with emphasis on the nature of our relationship to ourself, others, and God. The life of Jesus is discussed through examination of New Testament scriptures, and particularly the central theme of these scriptures, a call to self-reform. The course looks at some of the challenges teenagers face in living their faith: peer pressure, obedience versus freedom, and sexuality. The course ends with a treatment of the sacraments and the liturgy of the Church and their role within a vital contemporary Christian community.

Religion III: This course focuses on moral behavior and the responsibility for making moral decisions. Students reflect on their own moral values and compare them to a morality based on church teachings. Notions about sin in the world, and the need for personal redemption and reconciliation, are examined in the context of the demands associated with living a moral life. The formation and use of conscience is emphasized. The second phase of the course relates these principles to specific moral issues, both global (e.g. nuclear disarmament) and personal (e.g. sexuality).

Senior-year electives in a typical religion curriculum might also include: ***Christian Lifestyles***, a study of marriage and other lifestyles; ***Belief and Unbelief***, an investigation

into the ultimate ontological questions; *Contemporary Catholic Faith*, an examination of the roots of Catholic faith, including tradition and heritage; *The Meaning of Life*, an inquiry into values that will guide students in their choice of a personal philosophy; and *Death and Dying*, an examination of the issues and concerns surrounding the reality of death.

The religion course sequence described above assumes that faith is a developmental process. Full comprehension of the meaning of Christianity requires an understanding of one's humanity and the nature of belief. As the chairperson of the religion department at St. Edward's stated, such a course sequence has four objectives:

- to expose students to Jesus' teachings by exploring the New Testament;
- to help students develop an understanding of the process of adolescent growth and development;
- to lead students to see the development of faith as a parallel to human growth;
- to help students explore the value of prayer, worship, and the sacraments in their lives.

Two of the schools we visited had a much more traditional form of religious instruction, placing heavy emphasis on the notion of faith and Catholic practice as received truth, and using didadic instructional techniques. This is a marked contrast with the other schools where Socratic teaching methods were commonly employed. Nevertheless, religious instruction in even relatively conservative Catholic schools today differs substantially from that of only a decade earlier. It differs still more from the 1950s when the Baltimore Catechism was the organizing guide for all elementary and secondary religion courses.

In addition to changes in curriculum, Catholic schools have added some new elements to their religious activities since the 1950s. In particular, we have witnessed an increase in retreat and apostolic service programs. Contemporary retreat programs in Catholic secondary schools differ considerably from the earlier days of silent recollection. The central feature of these "days of recollection" in the 1950s was the sermons delivered by specially trained priests to several hundred students in the school chapel or auditorium. Most of the typical retreat day consisted of these talks, interspersed with opportunities to go to confession and attend Mass, and with silent reflection.

Current retreat programs typically involve group activities for freshmen and sophomores at an off-campus retreat center. Usually directed by a faculty member, the retreats might also involve a priest for the sacraments, and feature films, discussions, and talks by students and faculty. The retreats provide opportunities for students to think about their relationships with their parents, friends, and God, and to share their concerns and listen to others in a relaxed atmosphere.

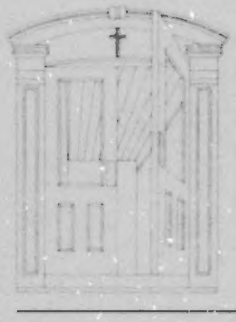
For the juniors and seniors, retreats may last three or four days and include several faculty members. At one school we visited, a team of 14 persons—five faculty (one a priest), seven graduates, and two senior leaders—are regularly involved. Over the course of the year, 54 of the 80 faculty work in the retreat program as retreat leaders, bus drivers, substitute teachers, and follow-up directors. This substantial faculty involvement reflects the importance attached to this activity within the total life of the school.

Apostolic service programs, sometimes called social action programs, constitute another major element in the religious activities of most Catholic high schools. These programs, which emerged in Catholic secondary schools in the late 1960s and early 1970s, represent the most tangible sign of the Catholic school's commitment to a just social community. As a board member of one of the schools remarked, "A school

should not call itself Catholic if it doesn't have an apostolic service program."

The director of the program at St. Edward's spoke about his perspectives on student service programs.

> I believe in service. It's important for students to realize that the things they do make a difference. We can heal people and make their lives better. We can raise the awareness of others. Physical contact is vital for Christianity. Some of our students are sheltered from poverty and from people of different races. This program is important because it makes them more aware. Work with the elderly is particularly eye-opening. The students [also] see that underprivileged and handicapped kids can be happy. They realize that the poor don't choose to be poor. This is a new understanding for most of them.



At Bishop O'Boyle High School, freshmen and sophomores regularly visit local nursing homes to talk with patients and perform small errands for them. The older students work in an inner-city soup kitchen. They assist in preparing lunches and in distributing the food to the needy. Although the school is relatively close to the inner-city, most of the students had not seen the poverty of the area until they became involved with this program.

Students, parents, and faculty have varying conceptions about the religious character of the school. The traditional framework that stresses one's personal relationship with a Supreme Being is in tension with a more ecumenical perspective that emphasizes social responsibility and communal relationships. This tension reflects a similar conflict within the American Catholic church.

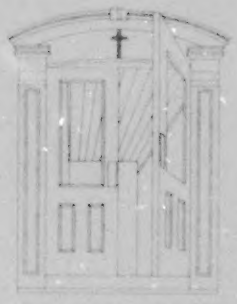
We have already alluded to this tension in our discussion of the different orientations of the religion curriculum within Catholic schools. Conceptions range from a relatively formal doctrinal approach, emphasizing the knowledge that all Catholics must possess, to a focus on developing individual conscience as the central component in faith development. While these contrasting orientations are most obvious in the structure of the religion curriculum, they are also manifest in the content and organization of retreat programs, and in the relative emphasis given to apostolic service activities.

This tension also occurs between parents and teachers. On a set of survey questions concerning the role of religion in their lives, parents' responses tend to emphasize the vertical dimension of faith. They express a view of religion as primarily a relationship between God and themselves that provides the strength to succeed, offers solace in moments of trial, and sets limits on personal behavior. Teachers, while also attesting to this vertical dimension, were more likely to claim that the horizontal character of religion—the concern for social justice and caring about others—was equally important. They tend to experience religion as a liberating force that challenges them to social action.

We found similar differences between parents' and teachers' responses concerning religious behavior. While approximately 75 percent of the parents and teachers report they regularly attend Sunday Mass, teachers were twice as likely as parents to be involved in social service or neighborhood projects. Parents tend to appreciate the individual spirituality in which they were educated and to have less personal engagement than teachers with the post-Vatican II emphasis on social responsibility.

We also asked students about the role of religion in their lives. Many of their responses were neutral or "no opinion," suggesting that while students have a broad knowledge of Catholicism in both its horizontal and vertical dimensions, they have yet to internalize either aspect. Where students offered an opinion, their answers tend to fall between those of their parents and their teachers. On the issue of social and community activism, students were more positive than their parents but not as much as their teachers.

For us, these tensions suggest an institutional vitality. School staff are actively



engaged in the struggle to seek after truth and create meaning, coherence, and value in the contemporary Catholic school. This requires identifying the essential Catholic values, and seeking to interpret and preserve them in an increasingly complex and changing world.

Chaplains played several roles in the schools we visited: pastor, counselor, conceptualizer, and animator of the Christian community. Chaplains can provide a powerful integrating force within the life of a school. Teachers, both lay and religious, provide a supportive base for this work and contribute substantially to the community life of the school.

Five of the schools we visited had chaplains on their staffs. These ministers served a variety of functions, celebrating liturgies, visiting students and parents in hospitals, praying with families who had lost a member through death, hearing confessions, serving on retreat teams, and counselling students.

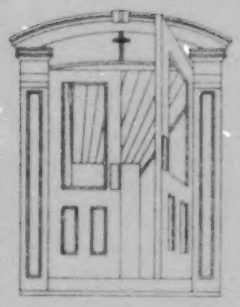
Some chaplains extend their roles in a variety of ways. At St. Cornelius' High School, the chaplain had organized a mime troupe to act out the gospel at a school Mass as it was read by one of the students. In our interview, he also spoke of his role as counselor within the school community:

> When something comes up on divorce or remarriage, for example, the students will defend their parents. I make no judgments of parents who are married out of the Church, but try to point out the supports that these families miss by living outside the Church community. I think that in their parishes many adults get the message that they aren't wanted. Students arrange for me to meet with their parents, and sometimes they are ready for reconciliation with the Church. That's a valuable part of what I do here.

At St. Richard's, the chaplain planned and developed the school's religion program, which emphasizes experiential learning and discussion. Although each course has a well developed syllabus with topics, learning activities, and discussion outlines, none has a required text. While several books are used for parts of classes, the chaplain wanted to ensure that teachers were flexible in presenting material to students and that there was no over-reliance on textbooks. More generally, the chaplain seemed to infuse vitality into the school. To a large extent, his spirit became the school's spirit.

Unfortunately, the severe shortage of ordained priests as well as the reluctance of some bishops and personnel boards to assign priests to high schools limit this ministry at Catholic secondary schools. Two of the sample schools, St. Frances' and St. Peter's, do not currently have a chaplain. Without a priest regularly on campus, the schools find it more difficult to schedule daily, or even regular, Masses, as well as the sacraments of reconciliation, baptism, or anointing of the sick. In such cases, schools must vary celebrants, with the result that students have no opportunity to get to know a single chaplain and build a relationship with him. Although the presence of a permanent chaplain at these schools might not instantly improve the religious environment, the Catholic character of both schools is substantially weaker in this absence.

Teachers, both lay and religious, provide a strong complement to the chaplain's role within the school. Having integrated Vatican II ideals into their lives, they serve as role models for the personal behavior of students. In their daily interactions with students, they make concrete the meaning of a Catholic school and Catholic values. It is expressed in their religious practice, in their personal lives, and in the dedication they bring to their teaching. Without the strong presence of teachers enthusiastically committed to building the school community, the spirit of the school would surely suffer.



Conflicts can also emerge between the religious and academic purposes of the school. They appear strongest in schools where academic quality is high. Families often choose these schools because of their academic excellence. While the religious character of the schools is accepted as a part of the total program, some tensions arise about the amount of time and energy devoted to these activities.

This conflict was evident in the sample schools with the strongest academic reputations. Their status as high-achievement schools is often a major reason for their selection by students and parents.[1] Many looked on these schools as a good economic investment: attendance would enhance one's chances of admission to a premier university, and would ultimately increase the opportunities for getting a good job. In some cases, parents and students have not endorsed the religious goals of the school, particularly with regard to social justice and responsibility, but simply accept them in their eagerness to share in the academic excellence of the institution.

The conflict is most likely to surface over the amount of time spent on apostolic service projects and classes missed for retreat programs. Balancing the emphasis on academics with a commitment to Catholic values and action can be a real dilemma for schools. It becomes necessary both to preserve the fundamental tradition and yet to interpret it anew for each new cohort of families and students and in the face of an ever changing environment.

1. See James Cibulka, Timothy O'Brien, and Donald Zewe, *Inner-City Private Elementary Schools: A Study*, Milwaukee: Marquette University Press, 1982; also Peter Holland, "An Examination of Factors Affecting Parental Choice of Catholic and Other Private Schools", Harvard University Graduate School of Education, Qualifying Paper, 1982.

Enrollment of non-Catholic students in Catholic schools increases annually. Although schools have made some accommodations for these students, particularly in terms of retreats, apostolic service activities, and

An influx of non-Catholic students is a recent phenomenon in Catholic education. In general, elementary and secondary school enrollments are slightly over 20 percent minority and over 12 percent non-Catholic. In some urban areas, Catholic elementary schools are overwhelmingly minority and about one-third non-Catholic.[2]

St. Madeline's provides a secondary school example. This urban college-preparatory school for girls is approximately 93 percent black and five percent Hispanic. The racial composition of this former elite academy for whites changed slowly in the late 1960s and then rather rapidly in the mid-1970s. At the same time

2. *United States Catholic Elementary and Secondary Schools, 1982-83.*

curriculum, problems arise over the sacramental programs. This is especially true in the celebration of liturgy, the central expression of worship within the Catholic community.

came an increasing number of non-Catholics—currently 45 percent, up sharply from 25 percent just three years earlier.

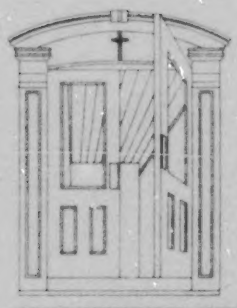
The religion curriculum at St. Madeline's reflects the priorities of most of the other schools we visited: scripture, sacraments, morality, the Church, and social issues. Discussions are employed frequently in religion classes. Although the curriculum is updated periodically, widespread changes to accommodate the large non-Catholic contingent have not been made. Non-Catholic students are required to take religion each semester, and teachers attempt to present the material in ways that might be relevant to these students. The school also has an active apostolic service program in which students work in soup kitchens, nursing homes, voter registration drives, elementary schools, and archdiocesan peace and justice projects.

Students whose religious home background is fundamentalist are a concern for some of the teachers, including the chaplain. Since fundamentalists oppose any interpretation of the Bible other than a literal one, the notion of sacred myth, and the concept of religious story as theology, disturb these students. Fundamentalist students also commented on the extent of ritual within the Catholic church, especially in the sacraments. Teachers report that these students found this quite different from their religion, which puts great emphasis on the written and spoken word. With regard to moral issues, religious practice, and the importance of prayer, the fundamentalist students were quite similar to other students in the school.

Of the sample schools, St. Madeline's had perhaps the most extensive religious services program. The sacramental program was quite active despite the large non-Catholic school population. In the school liturgies, however, some conflicts emerged. Although the instructional and experiential programs were successful, one faculty member noted that the liturgies were "a real struggle." She spoke of the difficulties in celebrating Catholic liturgies in a school that is nearly 50 percent non-Catholic.

> One reason liturgy is not as meaningful as it could be is because it is not connected to their lives. We should involve kids using symbols and the arts. Our kids have the arts in their blood. The reason it doesn't work is because they are not involved in the way we do liturgy—it's a spectator sport for them ... I can't get the kids to participate. It's complex. Some don't participate because they don't relate to it and some because they are non-Catholics. The liturgies are like a prescribed formula, something done to them, led by a white, adult male. There is not a lot of sharing. Although there are some nice moments, they don't feel like it's their own.

This comment echoes some of the tensions over the role of religion within the school and the conflicts over the ways in which this role should be expressed. It also introduces another issue about which the American Catholic Church is ambivalent—the role of women. Clearly, some within the school perceive liturgy as an event that requires an adult white male to preside over a group of faculty and students who are overwhelmingly minority and all female. Although it loses some in the recounting, the message she wished to convey seems quite clear.



Catholic schools have a distinctive character that transcends religious programs and personnel. This character is reflected in the social interactions among students and faculty, the roles that teachers assume and the ways in which they view their work, and the commitment of students, parents, and faculty to a shared set of humanistic values. This school culture reflects post-Vatican II conceptions of the Catholic church that emphasize community and social responsibility.

Besides the obvious Catholic features of a school—its programs, activities, and personnel—the schools are also "Catholic" in other, somewhat subtler ways. These may appear less distinct to those who have a long affiliation with Catholic schools, but they would be quite noticeable to anyone approaching them for the first time. They extend to the core of the institution—the perceptions of students, parents, and staff about the nature and purposes of the school and the ways in which these groups interact with one another.

Data from both questionnaires and interviews with students and teachers indicate teachers know their students by name and have substantial contact with them both in and outside the classroom. Partly because of the relatively small size of Catholic secondary schools and partly by design, teachers assume a diversity of roles within the schools as advisors, coaches, and activity moderators.

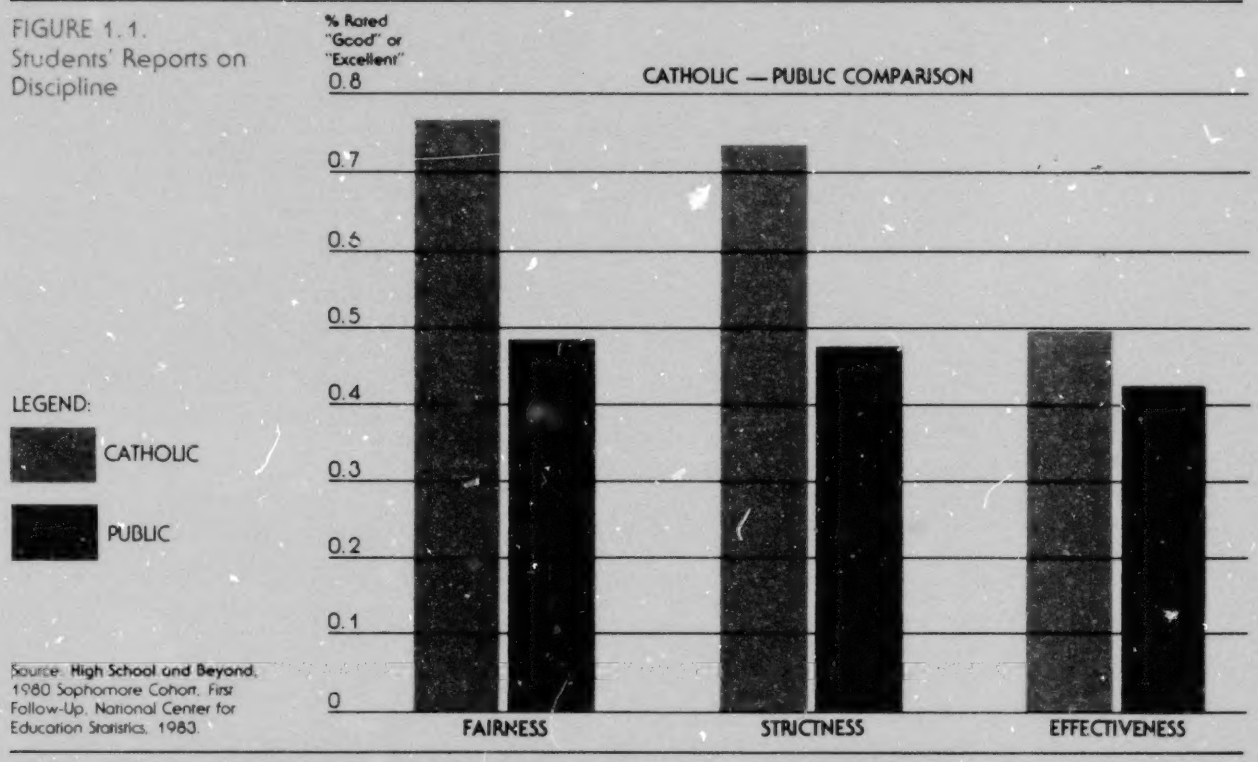
In describing the hiring of teachers, principals spoke of "building a staff" rather than filling a slot within some academic discipline. While expertise in the latter is obviously important, consideration is also given to the role each new faculty member could and should play within the school as teacher, coach, adviser, counselor, and activity moderator. For many faculty and students, the life of the school extends well beyond the traditional 8 A.M. to 3 P.M. boundaries.

Many teachers we interviewed described their work in the school as a ministry. While the financial rewards for teachers in Catholic schools are meager, their personal satisfaction is very high. They value students not only for the quality of their academic pursuits but also for the nature of their interaction with the life of the school and the world outside. They express a strong commitment to humanistic values (see Section 4 for more extensive information on faculty).

Parents too offered numerous comments about the frequency and quality of the exchanges between their children and the faculty. They see their adolescents' schools as humane and geared to students' needs, in sharp contrast to the Catholic schools many of them attended in the 1950s. They generally report that school discipline codes today are more flexible and attuned to individual needs rather than those they themselves had encountered. Many parents express the wish that they could have attended such friendly and responsive Catholic schools during their formative years.

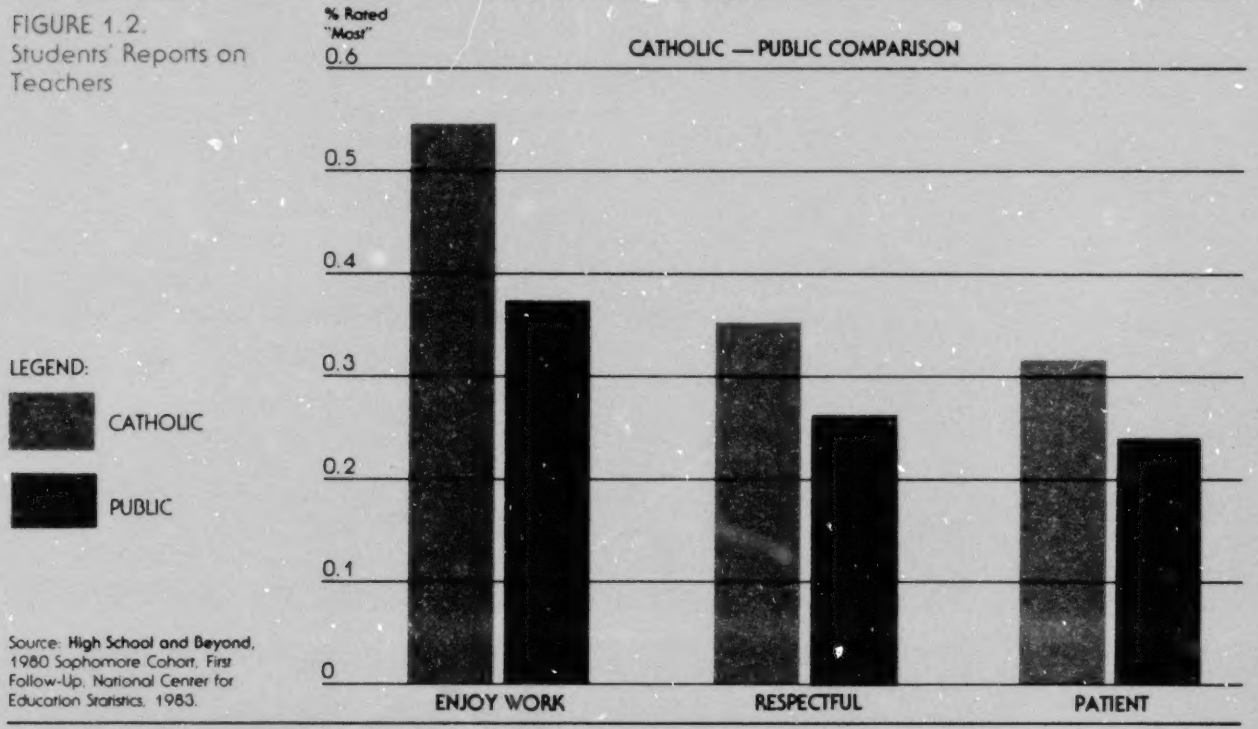
Student data from *HS&B* corroborate these points (see Figures 1.1 and 1.2). Catholic school students are more likely than public school students to report that their teachers enjoy their work, are patient and understanding, and treat them with respect. Similarly, student reports from *HS&B* support parental claims about school discipline. Catholic school students rate the strictness and effectiveness of school discipline much higher, and also regard it as somewhat more fair. While caution is warranted in any simple comparison of public with Catholic schools, when these data are viewed in the context of our own observations in schools and the extensive testimony of teachers and parents, we believe they provide a coherent picture of life in Catholic schools grounded in an extensive empirical base.

FIGURE 1.1.
Students' Reports on Discipline



Source: **High School and Beyond**, 1980 Sophomore Cohort, First Follow-Up, National Center for Education Statistics, 1983.

FIGURE 1.2.
Students' Reports on Teachers



Source: **High School and Beyond**, 1980 Sophomore Cohort, First Follow-Up, National Center for Education Statistics, 1983.

CURRICULUM AND ACADEMIC ORGANIZATION

This section is the first of three on the nature of academic life within Catholic secondary schools. Subsequent sections discuss the character of instruction (Section 3) and faculty roles and concerns (Section 4).

This section begins to develop a theme central to our findings: the curriculum and academic organization of Catholic secondary schools play crucial roles in advancing the broad aims of the school. A consensus exists among parents, students, and staff about school aims and the mechanisms needed to address these aims. The shared commitment resulting from this consensus is a powerful force shaping school life and a base of support for the work of the teacher. All this has a substantial impact on student achievement, socialization, and personal development.

In the early 1970s some Catholic secondary schools experimented with innovative programs. Students spent less time in class and possessed more opportunities for choosing how to use school time. Within the last several years, though, schools have begun a return to more traditional academic organization. Nevertheless, Catholic secondary schools remain more flexible and humane than in earlier times.

Changes in American secondary education occurred during the late 1960s and early 1970s. This was in response to the desires of students and educators who wanted schools to become more humane and relevant to student needs.[1] Many secondary schools, including a large number of Catholic schools, experimented with new ways of organizing curriculum, scheduling classes, and allocating school time.

These innovations were predicated on one central idea: learning is intrinsically interesting and through their rigid structures schools inadvertently suppressed this natural interest. Student learning would accelerate if these barriers were removed.

The schools we visited responded to this movement in different ways. A typical plan organized instruction into three components: large group teaching 40 percent of the time, individual study 40 percent, and small group discussions 20 percent.[2] Student and teacher schedules varied daily. Furthermore, students had significant discretion in the use of time.

Plans such as this required changes in schools. Class periods were reduced from 45 minutes to smaller units that could accommodate complex scheduling. Teachers needed to develop new skills to be able to direct independent study projects, lecture to large group, and do long-range curriculum planning. The emphasis on independent study created the need for self-paced curriculum materials. Because these were

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1. See, for example, Charles Silberman, *Crisis in the Classroom*, New York: Random House, 1970; Christopher Jencks, *et al, Inequality: A Reassessment of the Effect of Family and Schooling in America*, New York: Basic Books, 1972.

2. For more information on this program, see J. Lloyd Trump and Delmas Miller, *Secondary School Curriculum Improvement*, Boston: Allyn & Bacon, 1968; J. Lloyd Trump, *Image of the Future*, Urbana, Il: Commission on the Experimental Study of the Utilization of Staff in the Secondary School, 1959; J. Lloyd Trump and Dorsey Baynham, *Focus on Change*, Chicago: Rand-McNally & Company, 1961. In addition to the programs described here, there are other programs such as education by appointment, continuous progress learning, the Model School Program, and Stanford scheduling that espoused comparable goals and involved similar scheduling and curricular changes.

either not available commercially or expensive, teachers often created their own. This process required substantial training and preparation. In short, the new academic organization had effects that exceeded the obvious changes in school schedules.

Five of the sample schools changed instructional strategies along these lines. Although details varied, most schools initiated changes in the early 1970s. Typically, they worked with them for about five years before returning to a more traditional organization.

For example, St. Peter's adopted modular scheduling in 1968 and education by appointment in 1975. In 1980, both programs were eliminated. The former director of curriculum at the school spoke of it as "a control group for innovative educators." She thought education by appointment worked well with bright and motivated youngsters. Parents, though, complained about the amount of unstructured time given their children as well as the lack of homework. In addition, they sensed that students were not focused in their use of independent study time. Accompanying these parental complaints was a decline in the size and quality of the student body. The school then found itself conducting a program that required motivated and talented students with a changed student body. Parental complaints and the declining ability of incoming students seemed to encourage a cycle of further decline. Eventually, the school stopped the cycle by returning to a more traditional structure. In our interviews, parents and teachers were gratified the school again was emphasizing teacher directed instruction.

A similar experience occurred at St. Frances'. In the early 1970s, the school established resource centers, large and small group instruction, Learning Activity Packages (LAPs), and continuous progress learning.[3] Although the initial response was positive, parents and prospective students began to perceive that less homework was demanded and academic standards seemed lowered. The sense of lower expectations was reinforced by an emphasis on course electives that developed employable skills.

In 1982, a new principal at St. Frances' instilled a more rigorous philosophy in the continuous learning program. It emphasized more homework, increased written and research assignments in LAPs, and more scheduled class time, especially for freshmen and sophomores. As the principal remarked:

> If you want to categorize the changes that have taken place within the school, you could say that we've gone from an innovative to a more traditional program. And, in general, the students and parents are pleased with this change, and the faculty like the increased rigor at the school.

In general, experiments in academic organization led to more teacher responsibilities for curriculum development and more stress on limited fiscal resources. These combined with questionable assumptions in the underlying educational philosophy to create general problems.[4] Finally, after a period of experimentation, the

3. Learning Activity Packages, or LAPs as they are commonly called, often include objectives, some readings on the particular topic, references for additional information, and a set of assignments usually graduated in difficulty. When students complete their assignments and think they have mastered the material in the LAP, they request a test on that section.

4. What remained unclear in these analyses was whether the ends of education, for example, self-directed learning, and the means toward those ends were the same. Considerable concern was also raised about whether this educational philosophy was equally appropriate for all students. Some argued that a structured program was more appropriate for disadvantaged children. Without reviewing the details of this argument, it is sufficient to note that the educational philosophy of Catholic schools traditionally has been more closely aligned with the latter than the former.

schools emphasized once again the core academic program that was their tradition and that served students well in the past. Nevertheless, some positive consequences from the innovations remain in the schools we visited. The curriculum is broader and more flexible, the teaching more student-centered, and the general environment more humane than the Catholic schools of the 1950s and early 1960s.

The Catholic secondary school curriculum emphasizes core academic courses. Although the sample schools offered students a modest range of electives, they specified the major portion of courses required for graduation.

An Academic Core. Five of the sample schools were primarily college preparatory. Two others provided a broader range of offerings. St. Frances' had several courses in home economics and business. St. Cornelius' offered business and vocational electives along with special programs for learning disabled and educable mentally retarded. Even in the latter two schools, a central academic core for all students was required, except for the educable mentally retarded.

In general, the range of curriculum in Catholic secondary schools is modest compared to a comprehensive public high school. The typical Catholic secondary school emphasizes academic foundation courses: mathematics, science, English, social studies, and western European languages. The choices available to students at the sample schools were limited. Although most of the schools offered academic electives, they specified an average of 75 percent of graduation requirements. Required courses ranged from a low of 14 of 21 needed for graduation at one school to a high of 20 of 22 needed for graduation at another.

Although the core academic curriculum varied among the schools visited, a typical distribution included: four credits in English; three credits in social studies—usually western civilization, non-western cultures, and United States history; two credits in mathematics—usually algebra and geometry; two credits in science—typically physical science and biology; two credits in foreign language, with French, Spanish, and German as the most common options. In addition, as mentioned earlier, all sample schools required four years of religion.

Further evidence for this emphasis on an academic core is found in *High School and Beyond*. Table 2.1 indicates that Catholic school students take more academic courses than public school students. For example, the typical student in a Catholic secondary school takes an average of 1.12 years more of mathematics and .62 years more foreign language. Furthermore, recent analyses of transcript data from *HS&B* indicate Catholic school graduates average 15.7 credits in "new basics" subjects compared with 12.5 credits for public school graduates.[5]

TABLE 2.1
Number Of Academic Courses Taken by Public And Catholic High School Students

COURSES	PUBLIC SCHOOL	CATHOLIC SCHOOL
Foreign Languages	1.10 yrs	1.72 yrs
Physics and Chemistry	.55 yrs	.82 yrs
Mathematics	2.07 yrs	3.19 yrs

5 The National Commission on Excellence in Education recommended that high school students "lay the foundations in the Five New basics" by taking courses in English (4), mathematics (3), science (3), social studies (3), and computer science (.5). The *National Center for Education Statistics Bulletin* (February, 1984) summarizes an analysis of 12,000 transcripts from 1982 high school graduates and finds Catholic school students average over 3.2 more courses than public school students in the five "new basics" areas. The *Bulletin* does not compare Catholic and public school students in each area.

The distribution of core academic courses required in the Catholic schools we visited is compatible with recommendations from several recent school reform reports. John Goodlad, for example, recommends an increase in the number of required academic courses and a decrease in the number of electives, especially in vocational education.[6] Mortimer Adler, Ernest Boyer, Theodore Sizer, and the National Commission on Excellence make similar recommendations.[7]

A Closer Look at the Curriculum

Our field work focuses on mathematics and English curriculum. We observed classes in the ninth and eleventh grades, talked with department heads, and interviewed teachers. Our findings are summarized in what follows.

Mathematics Curriculum. Mathematics curricula vary across schools depending on student ability level. At St. Cornelius', the offerings were typical of the schools we visited (see table 2.2). There are three sequences to accomodate student abilities: remedial, academic, and honors. Although students are usually required to take only two mathematics courses for graduation, many take three or four.

TABLE 2.2
Typical Sequence Of Mathematics Courses At Catholic Secondary Schools

GRADE	I	II	III
9	General Math I	Algebra I	Algebra I
10	Pre-Algebra	Geometry	Geometry/Algebra II
11	Algebra I	Algebra II	Trigonometry/Analysis
12	Geometry	Trigonometry/Analysis	Calculus

Students in sequence I—10 to 40 percent at the schools we visited—need special preparation for standard mathematics courses. For these, mathematics instruction might begin with a review of the four basic computational operations, percentages, decimals, fractions, and practical applications of mathematics. Pre-algebra courses build on these and introduce the idea of a variable and equations involving variables.

Sequence II enrolls from half to three-quarters of the students at the seven schools. It is designed for students with average mathematics abilities and skills. Students in Algebra I study equations with one and two variables, exponents, radicals, quadratic equations, and linear graphing. The typical plane geometry course includes the theorems of Euclidean geometry with emphasis on constructions, congruency, similarity, and applications of the Pythagorean Theorem. Algebra II and Trigonometry extend the Algebra I treatment of linear and quadratic equations. They also cover graphing of first and second order equations, conic sections, irrational and complex numbers, logarithms, trigonometric functions and identities, and series and sequences.

The final sequence is for students with above-average mathematics abilities who qualify for a five-year sequence in high school. The content of the four years in Sequence II is collapsed into three years to allow the addition of calculus or other electives in the senior year. St. Edward's program was especially complete. It contained both Calculus AB (elementary functions and calculus of a single variable) and

6. John Goodlad, *A Place Called School,* New York: McGraw-Hill Book Company, 1984.

7. Mortimer Adler, *The Paideia Proposal,* New York: MacMillan Publishing Company, 1982; Ernest Boyer, *High School,* New York: Harper & Row, 1983; Theodore Sizer, *Horace's Compromise,* Boston: Houghton Mifflin Company, 1984; and National Commission on Excellence, *A Nation at Risk,* Washington, D.C.: U.S. Government Printing Office, 1983.

Calculus BC (AB plus infinite series, and differential equations). This school offered a total of 27 courses in mathematics including full courses in linear algebra, probability and statistics, and computer programming.

English Curriculum. The English program at St. Richard's was typical for the schools studied. The ninth grade emphasized narrative and descriptive writing, the rules of grammer, vocabulary development, and introduction to four literary genres—poetry, drama, the short story, and the novel.

Tenth grade students continue work on grammar and vocabulary. They also study the literary genres begun in their first year. At this level, there is more emphasis on critical writing. Students typically analyze and critique short stories and poetry. They are also expected to write essays which articulate a coherent point of view on a controversial topic.

Eleventh graders survey American literature from the colonial period to the twentieth century. Emphasis is placed on the relationship between historical and social contexts and the styles and interests of the period authors. When appropriate, teachers of American history and junior English classes assign complementary readings to highlight these relationships. Writing assignments include essays, critical papers, and research projects.

During the senior year, students read English literature from the Anglo-Saxon period to the twentieth century. There is a continuing emphasis on writing skills, English mechanics, and vocabulary development.

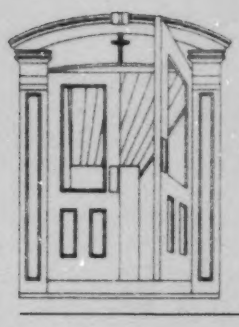
Major variations to this pattern involve the range of literature studied in a particular year. Several schools offer American literature in the sophomore year and English literature in the junior year. In this sequence, students choose from several electives in their senior year. These include advanced placement English, world literature, literary seminar, and special interest courses—e.g., American novels, creative writing, journalism, and contemporary fiction.

Curriculum Variation Across Schools. The schools visited use electives to communicate to students and parents their distinctive features. For example, St. Edward's offers 12 advanced placement courses, four computer courses, and other advanced humanities courses such as sociology and philosophy. On the other hand, St. Frances' makes available business courses such as stenography, data processing, typing, bookkeeping, and accounting. In addition, there are a limited number of home economics courses. As indicated earlier, St. Cornelius' offers special courses for handicapped students.

In general, the range of electives is relatively modest. It is intended to complement the academic core curriculum. This policy is significant in two ways. From an economic perspective, it provides a viable response to the fiscal constraints affecting many Catholic secondary schools. By concentrating efforts on a narrow set of activities, Catholic secondary schools accomplish much with modest resources.

There are also significant social and academic consequences to this concentration of effort. Previewing findings that we detail in Section 5, the courses students take are the strongest predictors of academic achievement. Since Catholic school students take more academic courses than public school students, a substantial part of the higher achievement level in Catholic schools is related to this fact.

Further, student background characteristics have a weak effect on academic achievement in Catholic secondary schools. The analyses conducted to date suggest one point: the schools' commitment to an academic core curriculum accompanied by high teacher expectations and appropriate educational activities to support those expectations are key factors in producing this achievement. The combined effect of school characteristics attenuates rather than amplifies background differences among students.



Teachers in Catholic schools expect all students to master a core academic curriculum, regardless of background characteristics. Further, they believe this curriculum is appropriate without reference to the postsecondary plans of a student.

Teachers' perceptions about the academic orientation of their schools were similar in the sites we visited. High levels of agreement were found across many questions that asked about the role of a core curriculum, college preparatory courses, honors programs, and diversity within the curriculum. These attitudinal responses are consistent with the curriculum structures present in these schools which emphasize required academic courses.

The responses of teachers to two questions suggest an important distinction. While only a third of them agree a college preparatory curriculum is best for everyone, over three-quarters agree all students should take and master a core academic curriculum. They held these views regardless of students' background or educational aspirations.

Further evidence of these high expectations were encountered in interviews with teachers. They spoke of the mastery they expected from their students. A mathematics teacher at St. Edward's stated:

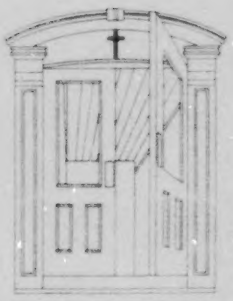
> I expect that the students will be able to study for themselves. . . . I expect quality work from them and will ask them to do it over if it isn't right, and this applies to the remedial as well as the honors students.

An English teacher at St. Peter's spoke about what she expected from students:

> I require that certain standards be met. I try to be compassionate. I listen to them and sometimes accept their excuses if they fall short [e.g. their homework is late] . . . But I also let them know that they can and will learn if they work at it, and I expect them to do that.

Data from *High School and Beyond* provide some corroboration for this. Over 70 percent of Catholic school students indicate that at least half of their teachers "make them work hard to learn." The figure for public schools is 58 percent.

In addition, these teacher expectations are strongly supported by parents and students. Evidence of this is found in our interviews, especially in the responses to questions on school goals and the adequacy of school programs. Peer group environments further support the academic objectives of the school. Very high percentages of Catholic school students in both the field sample and in *HS&B* respond that their best friends are interested in school, receive good grades, and have positive attitudes about the school and their classmates. These shared beliefs provide the basis for mutual commitment among parents, students, and staff. They have a powerful influence on behavior.



School policies assigning students to classes combine with the required academic core and a modest range of

The Catholic schools we visited were structured to include honors, academic, general, and remedial programs. Although some schools offered electives on topics such as small gas engines, horticulture, and cooperative office education, we did not observe the multiple tracks of academic, general, trade, vocational, and occupational programs often found in a comprehensive public school.

electives to result in minimal tracking within Catholic secondary schools. Similarly, school policies assigning faculty members to a range of classes from honors to remedial levels also diminish stratification at this level. Although the small size and limited resources of Catholic schools partially account for these effects, they are also a direct result of a conscious effort to distribute fairly educational opportunities to all students.

Most of the sample schools had flexible policies for assigning students to classes. Students reported they were not kept from classes in which they wanted to enroll. Though students were assigned to some classes, particularly ninth and tenth grade mathematics and English as a result of a placement examination or elementary school achievement tests, other class assignments were more random. In junior and senior years, students' choice of electives became the important factor in determining class assignment.

At St. Frances', a small number of students were grouped by ability in freshman mathematics and honors mathematics along with grades 10 to 12 English sections. As a result, most teachers had classes of diverse student abilities. Other than the single honors sections in English and mathematics, the other classes were heterogeneous. It was not unusual to find students from different grades taking the same courses. In general, students have extensive contact with a diverse group of classmates.

St. Frances' also has groups of advisors that encourage student mixing. This type group was not found in most schools. The groups consisted of 12 to 15 students who ranged across the four grades. They meet daily for a fifteen minute session with their faculty advisor. These meetings are similar to homeroom periods but provide an opportunity for informal conversation and small group counselling by the faculty. Although new students enter the group and others leave through graduation or transfer each year, it was common to have students remain with the same advisor throughout their high school program. This established long-term associations with schoolmates and a faculty member.

St. Edward's had the most extensive ability grouping of the schools we studied. Historically, students were assigned to a section based on ability. They remained with this section for all their classes. However, when St. Edward's instituted a new computer scheduling system in 1983, this allowed for more flexibility in assigning students to classes. With the new system it was possible for students to go from one honors class to another according to subject matter rather than having to attend all honors or regular academic classes.

Even within this school, the most stratified we observed, the allocation of resources diminishes stratification effects. For example, St. Edward's assigns extra resources and some of its most experienced teachers to students who need additional assistance. Unlike most public schools, the honors sections here tended to be the largest, with as many as 41 students. On the other hand, the remedial classes in the special freshman and sophomore program averaged between 15 and 20 in a class.

During our site visits at St. Edward's, we observed and interviewed students in the remedial classes. Freshmen in the program have 90 minutes per day of English instruction. This includes 45 minutes of reading which is not taught formally to other students. The extra time and small class size provide opportunities for individual tutoring and small group work. The students we interviewed thought the program helped them a great deal in other classes.

This program was adopted two years ago and strongly supported by the faculty. One of the teachers in the program spoke of its strengths:

> I like it because it gives these kids a chance to be successful. Before, they saw themselves at the bottom. Now they talk about being in a special program that gives them a chance to develop their academic skills. [The learning that occurs] gives these kids a much more positive attitude about themselves.

Faculty and administrators realize this program uses greater resources than any other within the school, but as one teacher commented:

> We've always been considered as a school for academically talented students, and to a large extent we are. This program, however, gives us a chance to make a difference with students who really need our help.

Parents of children enrolled in these classes support the program and appreciate the special opportunities provided their children.

On the one hand, students in Catholic secondary schools are diverse in race, social class, religious practice, and family background. On the other hand, they are relatively homogeneous in their commitment to learning, the community life of the school, and the humanistic values espoused there. Furthermore, the small size of many schools reinforces these shared values.

In each school visited we interviewed a random sample of students. One of the questions we asked invited them to talk about several of their schoolmates whom we identified with yearbook pictures. We asked if they knew each student, how they knew him or her, and what each person was like. Students' responses to our inquiries indicate a high level of personal identification in the ways students describe classmates. They spoke about other students in the following ways: "She's a friend of my big sister." "We go to the movies together." "She's in the play, the drama troupe, here." "My good friend knows him." "We're in the same advisor group." "I've talked with her around the school, but I can't remember her name." "He plays on the basketball team." "We went to the same grade school together." "I see her in Church on Sunday."

Students at smaller schools knew more of their schoolmates than students at larger schools. At Bishop O'Boyle, the smallest school in our sample, every student we interviewed knew all the other students about whom we asked. We showed the same collection of randomly selected yearbook pictures to faculty members. They also recognized all the students. At the other extreme, St. Edward's, with 1500 students, had recognition rates closer to 30 percent for students and 40 percent for faculty.

It appears then the small size of many Catholic secondary schools facilitates extensive social interaction among students and faculty. This, in turn, contributes to the sense of community within the school. Although *High School and Beyond* has limited information on the nature of social interaction within schools, the available data tend to support this proposition. Students in small schools have more leadership and executive experiences. They are also more likely to report that their teachers are interested in them, and that they, in turn, are interested in school.

We believe, though, there is more at work here than the effects of school size. Regardless of size, across all seven schools we visited, we encountered few comments of the type, "He's a jock," or "She's really stuck up." Negative stereotyping of students using comments such as these were virtually nonexistent. These interview data are further corroborated in student questionnaire responses. More than 85 percent of the students consider the relationships among students either good or excellent. Only 11 percent thought students became impatient with slower classmates. Only ten percent agreed that students from lower-income families had fewer opportunities in the school than more affluent students. An even smaller number, four percent, thought students ignored classmates who needed help. Responses from faculty and parents to the same questions produced similar results.

The cumulative effect of these data and our field observations point to a crucial phenomenon: there is a shared set of values among student, parents, and faculty that views the school as a social context committed to a vision of Christian community. This sense of community is accomplished with students who are quite diverse. As noted in Section 5, about 15 percent of Catholic secondary school students are minority and 12 percent are non-Catholic. In addition, a wide range of parental occupational and educational level is represented. Yet, there is homogeneity in one

important respect: there is a commitment to the broad goals of the Catholic school. We found considerable support for the idea that the aims of the school involve more than striving for an optimal level of individual academic achievement. A strong sense of social responsibility and standards of personal behavior which value kindness and caring toward others also are espoused. These are values that students aspire to attain. Furthermore, as we shall describe in Section 4, the staff live and actively attempt to foster this vision.

In sum, the small size of most Catholic secondary schools and the modest diversity in their academic programs combines with policies on assigning students and faculty to classes to minimize stereotyping and differentiation among students. Faculty and staff strongly support these policies. Furthermore, they believe students can and will learn and that it is their responsibility to see that this occurs. Finally, the commitment to Christian community provides coherence and meaning to the entire enterprise.

THE CHARACTER OF INSTRUCTION

The largest single portion of teachers' and students' lives is spent in classrooms. Here curriculum and academic organization meet teachers and students to create a social context for instruction and learning. This secion considers the nature of this social context within Catholic secondary schools.

Despite the age of the physical plant in many of the sample schools, the facilities were clean and free of graffiti and other signs of vandalism. This general sense of cleanliness and order carried over into the classroom to create a physical environment conducive to learning.

The buildings housing the schools we visited range in age from a colonial mansion erected in 1750 to a contemporary glass and brick school/convent complex constructed in 1966. The three most modern schools were built in the 1960s in stable residential suburban settings. The others were located in older buildings in inner city areas.

The newer schools tend to be larger, better equipped, and physically similar to a modest suburban public school. St. Madeline's is a good example. It had pleasant exterior lines and well-kept trees and lawn. The interior space was well-designed with wide hallways and indirect lighting in classrooms. In brief, the physical environment is spacious, bright, clean, and uncluttered. Although it is nearly 20 years old, the building looks almost new. It shows few signs of adolescents' wear and tear.

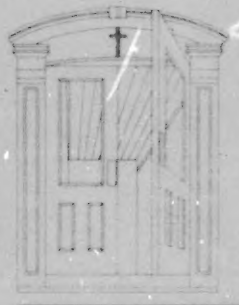
Some changes have occurred in the interior of Catholic schools over the past twenty-five years. There are fewer religious statues. One is more likely to find plants and greenery, carpeted floors, and a wider range of colors as was the case at St. Madeline's. These changes create a total effect that is softer and less austere than an earlier era.

The general ambiance of St. Madeline's conveys a sense of order and community. Students' art work and posters are displayed neatly throughout the hallways and in classrooms. In walking through corridors and lobbies, one is likely to encounter numerous groups of girls sitting on the floors in small circles talking excitedly about the events of the day. There is obvious affection among students and teachers. A personal embrace or kiss as students greet classmates and teachers is common. These interactions suggest a great deal of human caring. Comments from students and faculty conveyed the same impression: the environment and culture of this school feels like home.

The initial approach to St. Frances'—an inner city Baltimore school—provides a stark contrast to St. Madeline's. The barbed wire fence surrounding the back of the school yard is difficult to overlook. Visitors must ring a buzzer and be screened visually by a secretary before entering the school, located in a troubled neighborhood. As one moves inside, the ambiance changes dramatically. We were struck by how much the external world—the poorly maintained structures, the loud noise of traffic and the hectic life of the city—is left outside the school doors. The main lobby resembles a turn of the century mansion, large and graciously appointed. To the left is a sitting room furnished with period furniture and an old oriental rug. The floors are

marble. An attractive wooden staircase with highly polished bannisters and floor boards leads to the upper floors. A large stained glass window frames the staircase landing.

Despite the age of the facility and the need for major structural renovations, it is clear much attention is given to the physical environment at St. Frances'. It is a source of much pride. The general climate of the school conveys a strong sense of tradition, stability, and affiliation. This creates a psychological boundary as pronounced as the physical boundaries separating the school from the city outside.



Even in the larger schools such as St. Edward's where the physical structure is more traditional, the sense of pride about the school and the feelings of community it engenders are strong. Although elaborate physical plants are not a distinguishing characteristic of Catholic schools, they are generally clean, well maintained, and orderly. Respect for the physical institution is a value shared by staff and students. Further, this sense of respect transfers to the social environment as well. The overall effect is of a safe, supportive environment conducive to learning.

Classroom instructional materials were traditional. In addition to using textbooks, teachers regularly employed simple media devices such as overhead projectors. A few schools used more sophisticated equipment such as educational television and computers.

Teachers relied extensively on textbooks as the major instructional source. This was especially true in mathematics, science, and foreign language classes. In English, social studies, and religion classes, more examples of teacher produced materials and worksheets were found.

Most instruction was in conventional classrooms, although we noted a few instances of instruction in makeshift settings like the corner of an auditorium or part of a basement cafeteria. The seating pattern in the classrooms was traditional—students in rows of desks or tables facing the teacher in the front of the classroom. An occasional class had a seminar arrangement with students and teacher seated in a small circle facing each other. In most classes, however, the sheer number of students did not make this seating plan feasible.[1]

The instructional aids housed in classrooms—books, audiovisual equipment, maps, globes, posters, and charts—varied greatly across schools. Virtually every classroom contained chalkboards, bookshelves, and bulletin boards. In general, teachers had access to the basic instructional materials required for their job.

In terms of more specialized equipment, most teachers had ready access to film projectors and overhead projectors. Instructional television and computers were less available, however. One school had a relatively comprehensive computer center offering both instructional computing and extracurricular computer activities for students. Computer education programs and facilities were quite limited in the remaining schools. Some plan to make improvements in this area within the next year.

Teachers choose various approaches to decorating their rooms. Bulletin boards often display material relevant to course content. Examples of this are a Shakespeare festival poster in a junior English class, a diagram of the solar system in the physics lab, and a scene from the Loire Valley in a French III classroom. Numerous items encouraging strong school spirit were also present. These common findings include slogans exuding school pride—"We are the Royal Family!" at St. Peter's where the team nickname is the Royals—and posters exhorting attendance at school

1. The rectangular row and column seating arrangement appears to be a universal characteristic of secondary education. Other researchers such as Goodlad and Sizer found similar arrangements in the field sites they visited.

athletic or social events—"May the Force Be With Us Against Aquinas Prep on Friday! Get Your Ticket for THE GAME Today." There were also displays of students' work. Art projects, collages for religion classes, and examples of student writing were prominently exhibited in classrooms. The message teachers wished to convey was clear: we are a community, and your contribution here is valued.

Although teachers use class time in numerous ways, in many classes we found a general set of activities. This consisted of lecture, discussion, review, practice and drill, and evaluation. Teachers reported regular homework assignments, employed testing as an essential part of their teaching, and used other measures such as written work and discussion to evaluate student progress.

In the sites we visited, class periods range from a minimum of 35 to a maximum of 57 minutes. The average period is about 46 minutes. During the second round of field research, we used a structured observation protocol to document carefully teachers' use of class time. Table 3.1 indicates the time allocated for 13 different activities observed in 57 classes.[2] These data indicate that most classroom time is spent on six activities: discussion, introduction of new material in the form of teacher lectures and demonstration, review of homework, in-class writing assignments and homework, clerical details, and quizzes, tests, and drills.

TABLE 3.1. Average Amount of Time Spent on Various Classroom Activities (Field Research Sample)

ACTIVITY	AMOUNT OF TIME (Minutes)
Discussion	12.4
Instruction, New Material	10.3
Homework Review	6.7
Written Assignment in Class	3.8
Clerical	2.6
Writing Assignment (Composition)	2.1
Quiz, Test, Drill	1.9
Review of Quiz, Test, Drill	1.8
Oral Reading	1.8
Review of Previous Work	1.6
Silent Reading	.5
Test Preparation	.2
PA Announcements	.1
TOTAL	45.8

One of the better classes observed was an honors Algebra I class at St. Richard's. This well-planned, quick-paced freshman class worked on solving equations in one unknown by substitution, graphing, and intuition. The teacher began the class by describing briefly the plan for the day, how it related to what they had been doing, and where they were going. She then lectured for about 15 minutes on the new material. Afterward, some students went to the blackboard to work on problems related to this topic. Toward the end of class, she gave a brief quiz on the homework assignment from the previous night and assigned some new homework. She spent the final minutes of class reviewing work with students absent the previous day.

2. The data presented in Table 3.1 underestimates the amount of class time devoted to testing activities. In order to get as much information as we could during our limited field research time, we did not observe in classrooms where a full period test was underway. Data from teacher questionnaires suggests that whole period tests occur at least once every three weeks. All testing time referred to in Table 3.1 is for short quizzes only.

This class was unusual because of its crispness and overall quality of instruction. It does share several features found generally in Catholic secondary school classrooms. In particular, teachers in our field sample indicate testing and homework are a basic component in their teaching. They give at least one quiz per week and a test every two or three weeks. Approximately two-thirds of the teachers report they give homework three to four times a week. Over 50 percent of the students in the field sites report they spend more than five hours per week on homework. *High School and Beyond* data (see Section 5) indicate these are typical responses. Finally, a surprisingly high 62 percent of teachers respond they "always" or "usually" grade students' homework.

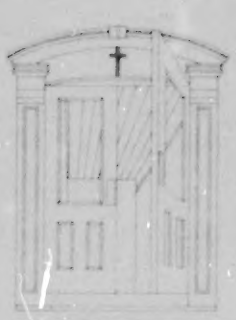
In addition to tracking the use of class time, we also documented the types of teaching strategies employed.[3] We categorize teacher-initiated instruction into three groups: didactic instruction where lecturing or teaching by telling is emphasized; coaching where the teacher works with individual students in a drill and practice format; socratic where the teacher employs questioning to enlarge ideas, probe, and generally simulate higher level cognitive skills.

Virtually every class visited involved some amount of didactic instruction. While the most common strategy, it was rarely the exclusive one. Most classes involved some amount of individual coaching and socratic teaching. The latter, however, might only be for a small portion of the class. It was more likely to occur in English, religion, or social studies.

Perhaps the best example of discussion teaching was an English class in which the poetry of Langston Hughes was analyzed. The teacher elicited comments from students and encouraged them to use them as a basis for interpreting the poem. The teacher probed this upper-middle class white student group with questions such as:

> Have any of you ever been in a situation where you were in the minority? What did that feel like? Have you ever been in a situation where life has been extra hard? What was it like? What do we know about Langston Hughes? What insights do you have about his life after reading his poetry?

Although classes of this type were rare, we did observe a mix of activities and teaching techniques, even though didactic teaching was the most frequently employed. Across virtually all classes visited, we found a strong emphasis on student accountability in the form of regular homework and frequent testing.



3. This system for categorizing classroom teaching is based on ideas advanced by Mortimer Adler, *The Paedeia Proposal*, New York: Macmillan Book Co., 1982.

Students demonstrated a high level of engagement in classroom activities. This manifested itself through obvious positive student attention to class activities and through

Assessing the engagement of students in classroom instruction is an elusive task. Fundamentally, we want to document cognitive processes not observable directly. As an alternative, one looks for behaviors that indicate these latent processes may be occurring. We approached the problem in two ways. First, we looked for indicators of no involvement in classroom activities: students with their heads on their desks; students without books, paper, or pencils; and students talking to others during class instruction. Second, we noted signs of active student participation: contributions to class discussions; working out problems at the board; reading aloud from the text; and asking questions. At two predetermined points, 10 minutes into each class and 10

the absence of negative behaviors disruptive to classroom life. The rate of student absences, tardiness, and class-cutting were low.

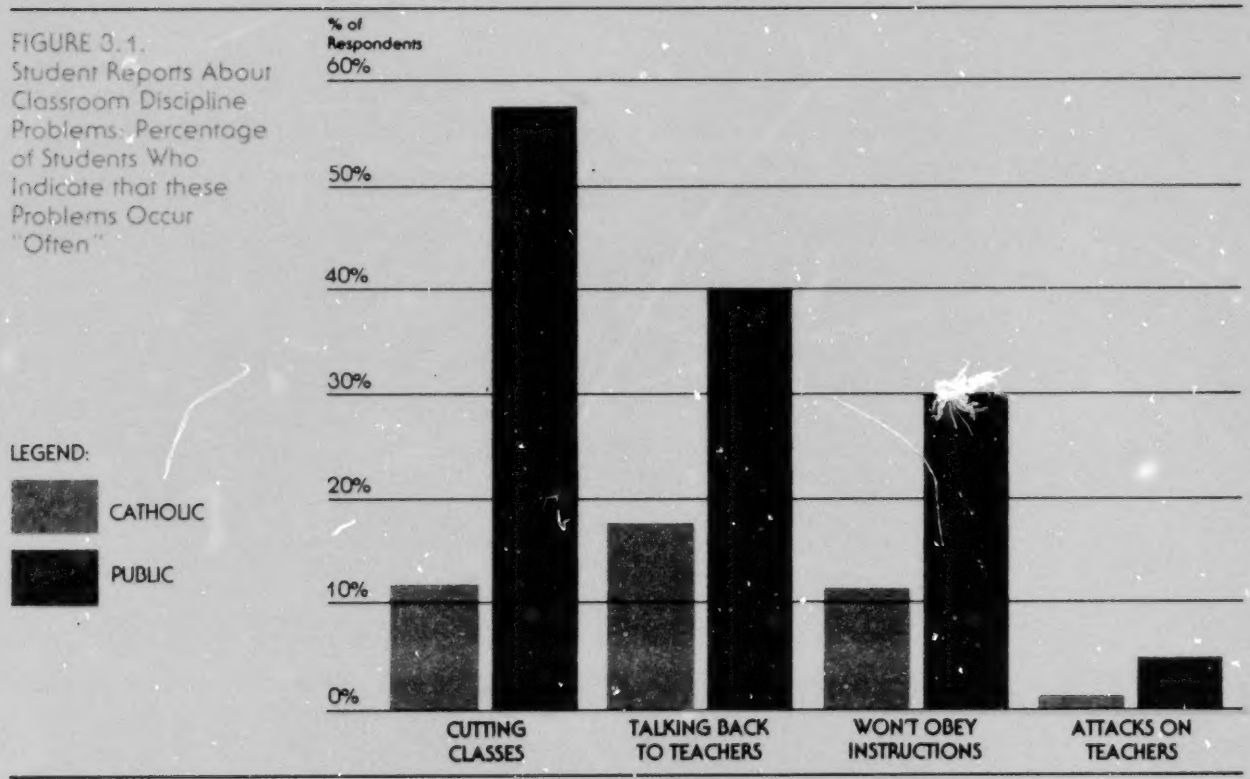
minutes before the end of each class, we recorded what each student was doing. In the 57 classes observed, almost 90 percent of the students were engaged at the first checkpoint. This fell to slightly under 80 percent at the second assessment.

These data suggest a high level of student engagement in classroom instruction. Further, the relatively small proportion of students not engaged refrained from interfering with the engagement of others. Across all the classes visited, we did not observe a single incident of student classroom behavior that disrupted the instructional program. Data from teacher questionnaires in these schools and national information from *High School and Beyond* indicate these are characteristics of student life within Catholic schools. They are not limited to the classes we observed.

Fewer than five percent of the teachers in our sample report any of the following problems: student fights in class; students under the influence of alcohol or drugs; physical or verbal abuse of students; students ridiculing other students; and excessive absences or tardiness. Failure to do homework and minor infractions were cited by fewer than 15 percent of the teachers as regular classroom problems.

Student data from *HS&B* offer a similar picture. Figure 3.1 indicates the low incidence of students cutting classes, refusing to obey instructions, talking back to teachers, and physical attacks on teachers in absolute terms and in comparison to public schools. Similarly, the vast majority of Catholic students: express a strong interest in school both on their part and on the part of their friends; believe that the academic quality of the schools is either good or excellent; agree almost unanimously that their schools have good reputations within the community. *HS&B* data from principals provide further confirmation.

FIGURE 3.1.
Student Reports About Classroom Discipline Problems: Percentage of Students Who Indicate that these Problems Occur "Often"



As we integrate these various sources and types of data present in this section and the preceding ones, a clear picture of life within Catholic school classrooms emerges. Students are actively engaged in the instructional process. They see their teachers as interested in them as well as patient and understanding. Teachers are also firm and committed to high standards. Mutual respect among students and teachers alike characterizes the social environment. The incidence of disruptive behaviors of any kind is very low. This is an environment conducive to learning. And in fact, learning does occur.

FACULTY ROLES AND CONCERNS

The Catholic school community has been experiencing a quiet transformation for some time. The percentage of lay faculty has increased steadily each year over the last two decades. Lay persons now constitute 78 percent of the teachers. Our projections, detailed in Section 7, indicate that by 1995 most Catholic school faculties will be entirely lay. This transformation has profound implications for the academic and spiritual character of Catholic schools and the manner in which they are financed and governed. It is particularly important because of the central role Catholic school faculty have in creating the school environment and in shaping students' experiences within that environment. This idea, introduced in Section 1, is elaborated further in what follows.

COMPARISONS OF RELIGIOUS AND LAY FACULTY IN CATHOLIC SECONDARY SCHOOLS

Consensus exists within the faculties in the schools we visited about the academic purposes of the school and the organization and methods of instruction employed to address these purposes. Teachers, lay and religious, share similar conceptions of their role in the schools. From this perspective, the transformation of Catholic school faculties from predominantly religious to lay is a story of continuity with tradition.

When analyzing religious practices and opinions on moral issues, we noted differences between

Historically, religious orders have shaped the character of the Catholic schools they sponsor. These orders are responsible for the school tradition, part of which includes a commitment to an academic core curriculum. We found strong support from religious and lay faculty in the field sites about this aspect of the school's mission. Teachers' questionnaire responses indicate religious and lay faculty agree that students should take a core academic curriculum (77 and 76 percent, respectively), and all students should master such a curriculum (80 and 85 percent, respectively). Similarly, only 29 percent of religious and 33 percent of lay faculty think all students should be required to take a college preparatory program. We interpret these data as strong support for the principle which organizes the academic side of Catholic secondary schools: an academic core curriculum is appropriate for all students regardless of background or post-secondary plans. When discussing academic goals for Catholic schools, the transformation from predominantly religious to lay staffing is a story of continuity with tradition.

Religious and lay faculty also advocate similar educational philosophies and employ comparable instructional methods. Both groups emphasize regular homework and testing. In our sample, 58 percent of religious and 63 percent of lay faculty assigned homework a minimum of three times per week. Similar percentages indicate they "frequently" or "always" graded homework. Eighty-seven percent of religious and 90 percent of lay teachers report that testing is a regular part of their teaching. In the classes we observed, both lay and religious teachers tend to emphasize teacher-directed instruction.

In commenting on the spiritual climate of the school, religious and lay staff espouse similar human values and standards for social responsibility that should guide personal behavior. Both lay and religious faculty believe overwhelmingly that

religious and lay faculty. These mirror the conflicting perspectives within the American Catholic Church on such issues.

their schools should foster social justice and caring, promote the building of a Christian community, and offer students the opportunity to interact with persons of other races.

The parents interviewed express satisfaction with the work of teachers within the schools. They note no obvious differences between the performance of lay and religious faculty. Students also report that both religious and lay teachers were accessible and made time available for individual students. When asked to differentiate between the two, students were often at a loss. They generally cite the younger age of the lay faculty members.

When we turn our attention to religious practices, however, there are modest differences between these two faculty groups. Whereas all religious members indicate they regularly attend Sunday Mass and about 50 percent regularly go to confession, the lay faculty responses were 70 and 16 percent respectively. Approximately 33 percent of religious staff and 16 percent of lay faculty are currently working on social service or neighborhood projects.

The questions on moral issues indicate a greater divergence. Approximately one-quarter of the religious faculty and half of the lay staff agree that remarriage after divorce is "usually" morally right. While only four percent of the religious staff thought premarital sex between adults who love each other is "usually" morally right, about one-quarter of the lay faculty agreed with this statement. Finally, on the question of "legal abortion if the danger to the mother's health is great," 11 percent of the religious faculty and 35 percent of the lay faculty thought this is "usually" morally right.

We should be careful not to read too much into these data. While the differences between lay and religious faculty on certain religious practices and moral issues suggest some conflict, this is by no means unique to Catholic school personnel. These groups mirror disagreements within the American Catholic Church. In fact, given the diversity of opinion within the contemporary Catholic Church, in our view there is a remarkable consistency in the positions expressed in the teacher questionnaires.

GENERAL CHARACTERISTICS OF TEACHERS IN CATHOLIC SCHOOLS: THEIR ROLES AND CONCERNS

High School and Beyond data and the NCEA statistical summaries provide descriptive information on Catholic secondary school faculties.[1] Sixty percent of these teachers are female, 89 percent are white, and 78 percent lay. The total staff includes 16 percent female religious and six percent religious brothers or priests. All staff have at least a bachelor's degree, and 42 percent have their master's. At present, national data on teachers' age or religion is limited.[2] The median age for Catholic secondary school teachers in our field sample which shows a high degree of consistency with national data on other indicators was 35 years. The staffs were 85 percent Catholic. Religious faculty were typically older and more experienced than lay colleagues. In the schools we visited, the religious faculty averaged between 10 and 25 more years of teaching experience than the lay staff.

1. *United States Catholic Elementary and Secondary Schools, 1982-83.*
2. See *A National Portrait of Catholic Secondary Schools: Preliminary Report, Phase I,* Washington, D.C.: National Catholic Educational Association, 1984.

The typical teacher in a Catholic secondary school carries a heavy workload. It includes multiple class preparations and extensive extracurricular activities. Teachers in the field sample spend over 40 hours per week at school. Over half have after-school responsibilities such as coaching or moderating activities.

Teachers in our sample report they spend an average of eight hours and 15 minutes at their schools each day. The typical teacher arrives shortly after 7:30 in the morning and leaves approximately 3:45 in the afternoon. She teaches five 45 minute periods per day. This may include responsibility for a single section in one course and two sections each in two others. She also spends 3 hours and 45 minutes in class each day. She might have about 45 minutes for class preparation, approximately an hour for lunch and personal time, and 30 minutes for passing between classes. The remainder of her time on campus is spent correcting papers and working with individual students.

After the instructional day, many teachers participate in coaching athletics, moderating extracurricular activities, and performing other school-related duties. Forty-nine percent of the teachers in our sample schools moderate between one and three co-curricular activities such as the Spanish Club or the debate team. Typically, this required about six hours per week of the teacher's time throughout the school year. When it comes to coaching athletic teams, 24 percent of the teachers report spending an average of nearly 11 hours per week on such activities. In addition, half of the teachers report they spend an average of over eight hours per week on other school-related responsibilities like bingo, fund-raising, and parents' meetings.

Teachers also report spending between eight to ten hours per week at home on school-related work. This includes correcting papers, reading for class assignments, and preparing for the next day's classes. Adding together the regular teaching time, extracurricular activities, and home preparation, it is clear many Catholic school teachers devote over 50 hours per week to work.

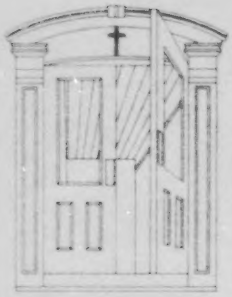
While this data overviews faculty responsibilities, a brief look at a typical day for an individual Catholic secondary school teacher—in this case, Margie McDaniel, a second year faculty member at St. Peter's—is instructive.

Margie usually arrives at school at 7:45 A.M. She begins her teaching day with homeroom at 8:15. At 8:30, she teaches an English I class for average ability students. It meets until 9:20. She moves immediately to a remedial reading section for 15 students, her next instructional period. During her free period from 10:10 to 11:00, she may correct papers and prepare materials for one of her later classes. From 11:00 to 11:50, she teaches an honors section in English I. Lunch with faculty colleagues consumes about 20 minutes, and the remaining half hour may be spent talking with students involved in one of the co-curricular activities she moderates. At 12:40, she begins her second section of English I. It is followed by an English II section for average ability students.

The remaining part of her afternoon schedule changes with the seasons. During the winter, she coaches basketball for the girls' varsity team from 2:45 to 4:15. This is normally followed by an hour or so of administrative work associated with being the girls' athletic director. In the fall, she coaches junior varsity volleyball. In the spring, she assists with softball. On days with no athletic practices, she may spend a few hours on her duties as English department chairperson. She rarely leaves St. Peter's before

5 P.M. On many occasions she stays at school well into the evening for athletic events or parents' meetings. She estimates she typically spends at least two weekends a month at the school for various co-curricular activities.

Margie spoke with enthusiasm about teaching and coaching at St. Peter's. She enjoys the students and the community spirit. Getting to know students and having some influence over their personal growth is rewarding. Although the hectic schedule is sometimes overwhelming, she claims her organizational skills and ability to use time productively have grown in this process.



On numerous occasions we heard similar comments linking positive testimony about school life with a remark about how stressful it can be. In particular, teachers mention the daily stress of correcting papers, admonishing students, monitoring cafeterias and hallways, meeting with parents, and the extended work days. One teacher stated:

> Although I really enjoy working with kids, I get tired at times. The pace is hectic, and it always seems that there are more jobs that need to be picked up.

Catholic school faculty see their role as broader than providing instruction in a subject matter area. They are concerned with the type of person each student becomes as well as how much a student knows. A number of teachers report they consider their work as a ministry and their role as one of shaping young adults.

We asked teachers to tell us why they taught at Catholic schools. We encouraged them to reflect on how they felt about their work. To tell this story, we rely heavily on their comments.

Virtually every teacher interviewed indicated their work is more than the five-class, seven-hour day. In addition to being committed to teaching, class preparation, and the instructional programs, they spoke also of the emphasis on personal values and community at their schools. A sister at St. Cornelius' talked about her situation:

> I don't view it as job. What I see here, and one of the reasons our religious community is here, is for the education of the poor. . . . I think the importance of this work is not only in the academics but also because we teach personal values and are concerned about meeting students' other needs as part of what we do.

A faculty member at St. Edward's reflected:

> I see what we do as teachers on three levels. We are role models in that we are living examples of the beliefs that are taught in religion classes. We also have an obligation to teach values. I used to think that I was a Spanish and French teacher Now I know that my values are at least as important as the content I teach. Finally, I remind myself that we play a four year part in these students' lifetimes. . . . What we have to transmit is a vision for the future to help them mold themselves into the kind of persons they want to become.

A faculty member of St. Frances' spoke about integrating life with learning in her classes:

> As far as I'm concerned . . . besides the background on literature, grammar, and the like, we discuss life and the problems that students are likely to encounter. It is just as important what they learn about life while they are here as what they learn about academics.

Clearly, teachers in Catholic high schools see themselves as role models for their students. One teacher stated succinctly a view shared by others:

> Even if teachers don't teach religion, we teach by our lives. Basically, this school is a good environment, and we teach by our example and who we are. We strive to make students more conscious of the world around them and how they fit into it.

Finally, some teachers spoke about their work as a ministry "of helping people, being involved, and feeling fulfilled as a result," as one teacher phrased it. Some view what they do as integral to the church's work in education and religious development. The first and most obvious aspect of this is in teaching religion. The chairman of the religion department at St. Edward's said:

> In hiring teachers, we look for ministers. In some schools, people start as teachers but then plan to get into business or some other area afterwards, but we reinforce academic work and ministry here.

In addition, some teachers claim an important part of the work of the school involves supporting students whose families are troubled. Principals and counselors in many of the schools we visited commented on the increasing number of students whose families experience stressful situations such as divorce or unemployment. In reflecting on this ministry within schools, one teacher spoke of the surrogate parent role that teachers and schools take on for some students.

> It's amazing when you hear them talk about their families. It's like they don't have any stability at home. Their life here at the school is about the only thing that is stable in their environment. I feel at times that we function almost like parents for some students.

In broad terms, many faculty view their multiple school roles — teacher, coach, counsellor, and adult model — as a ministry unto itself. On numerous occasions we heard comments such as:

> This is basically my ministry. This is my way of serving God in my life. I think many of the faculty here look on it in this way.

The manner in which Catholic school teachers talk about their work is reminiscent of the multiple roles played by public school teachers in an earlier era. As recently as 1945, many public school teachers were forced to board with families in the community because of limited incomes. A positive result of this practice was that teachers were an integral part of the community in which they taught and whose values they shared. As Diane Ravitch recounts:

> Even where teachers led independent lives, they were expected to spend after-school hours as supervisors of extracurricular activites and to know their students; they, in turn, could count on parents to support and reinforce the demands made by the school. Colleges and universities never questioned their role *in loco parentis*: they were responsible for the young men and women in their care, as if the institution itself were the parents.[3]

This description of an earlier age in public education seems similar to the scenes we observed and the voices we heard in today's Catholic secondary schools. Faculty believe teaching values and shaping the lives of young people by action and example are just as important as the academic components of their work. They interpret their roles as including concern for personal and academic development. Parents support this concept. They remarked often in our interviews that the academic quality and personal commitment of the faculty were major factors in their decision to send their child to a Catholic high school.

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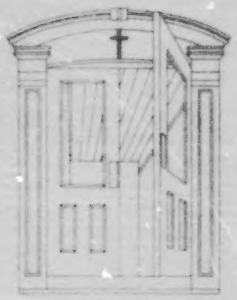
3. Diane Ravitch, *The Troubled Crusade*, New York: Basic Books, 1983.



Students spoke of the commitment, responsiveness, and high academic standards of their teachers. Parents and principals expressed similar positive views toward the faculties in the schools we visited.

In interviews and on questionnaires students report almost unanimously that their teachers are available to assist them before and after school. A group of seniors and juniors spoke of their teachers in these words:

> The teachers are here to help you. . . . They really do care about you. After you're here at the school for awhile, you begin to realize that they are ready to talk with you and listen to what you want to talk about.
>
> This school is strong academically and the reason is the faculty. They're good teachers, dedicated people, and they prepare us well for college.

Parent questionnaire data corroborates these points. Nearly 90 percent of the parents characterize teachers' interest in students as either "good" or "excellent." Over 80 percent indicate "teachers definitely are willing to help students before and after school." Almost 50 percent of parents report extensive student-teacher interactions occurred in their schools. Over 60 percent of the parents agree that "teachers support students from troubled families." In interviews, parents spoke of teachers treating their children with respect. This enabled the students to grow in self-respect. Other parents commented that Catholic school teachers support the values of the family. They thought this was very important.

High School and Beyond data confirms these views. Catholic school students rate their teachers high in evaluating their interest in students inside and outside class. This is also true of the respect, patience, and understanding that teachers demonstrate. The evidence from parents and students indicates an enthusiastic endorsement of Catholic secondary school teachers. As one parent said, "They are generally very exceptional people."

Principals' reports from *HS&B* provide further evidence. Principals in Catholic schools are less likely than public school principals to rate teacher absenteeism as a problem. In fact, Catholic school teachers are absent less. Catholic school principals are also less likely to indicate teachers at their schools lack motivation and commitment. This data suggests a high degree of satisfaction by Catholic schools principals about their faculties.

There was a disquieting note found in the data collected from teachers. Although they demonstrate a strong commitment to their students and their schools, they indicate

We document in Section 7 that Catholic school teachers' salaries average 30 to 40 percent less than their counterparts in public schools. Many of the teachers interviewed spoke of holding second jobs and making personal sacrifices to continue teaching in Catholic schools. One third-year teacher talked about her struggles:

> I worry about my finances quite a bit. I always have a second and sometimes even a third job—selling in department stores, working as a youth counselor, and the like. It bothers me that I might not be able to afford to stay here, because I really enjoy the girls and my work.

widespread dissatisfaction with their low salaries. They thought their schools could afford to pay them more. There is a sense of disenfranchisement, and even further, a lack of influence in matters of governance and finance.

The salary schedules at many schools limit the range of individuals who are able to remain on the faculty. An experienced teacher at St. Frances' noted:

> There are no men on the faculty. They couldn't afford it. Our faculty consists of two distinct groups: young college graduates on their first job and wives of settled businessmen for whom the money isn't important. In general, it's the last group that stays.

Teacher questionnaire data indicate a high degree of dissatisfaction with salaries. Sixty-five percent thought their salaries too low. None thought them too high. Only 15 percent thought their salaries about right, taking into consideration other intangible benefits of teaching at such schools. St. Cornelius' and St. Edward's were the two schools at which the salary schedules were most comparable to local public schools. Fewer than ten percent of these lay faculty members indicate that salary would be the main reason for leaving the school. On the other hand, at the schools with the lowest salary schedules, nearly 30 percent of lay faculty list low salaries as the major reason why they might leave the school.

Most important, only 38 percent of the teachers thought their schools were paying "the most that they could afford." This data suggests a credibility gap between teachers and those who set salaries. This point is supported by teachers' responses to questions concerning their degree of involvement in establishing school policies.

On the one hand, teachers felt strongly engaged in classroom and curriculum matters. On the other hand, they indicate very low levels of involvement in financial and policy matters affecting the whole school. Our data shows 95 percent of the teachers in the schools visited say they had a good deal of influence over their own teaching, and 60 percent report they exercise a good deal of influence in the area of curriculum. Only seven percent, though, report they had much say in the financial management and planning occurring in the school. The figures are also low (17 percent) for teacher influence on school policies. As one teacher remarked:

> I feel frustrated that I'm never asked for my opinion. I think I have some valuable ideas and yet I never get a chance to express them to the people in charge.

Expressions of this type were not common in our interviews. They provide evidence, though, that some teachers feel a lack of influence within the school they personally support, often at great sacrifice.

In our view, there is an aspect of the transformation of Catholic schools from religious to lay institutions that demands more attention. We believe teachers are the great strength of Catholic secondary schools. Their extended work days and broad investment in school life reflect an uncommon dedication. For this reason, we take notice of the surprising degree of disenfranchisement of lay faculty from finance and governance matters in Catholic schools. The current successes and the future of Catholic schools depend on the continued commitment of the lay faculty. Those interested in the survival and health of Catholic schools should not ignore the voices of those so essential to continuing the tradition, and who, in growing numbers, staff the schools.

Even as we point to this vexing problem, we also note we did not observe indications of open conflict between administrators and faculty in the schools visited. As we demonstrate in Section 8, this seems due largely to the strong sense of deference to religious faculty that influences governance within Catholic schools. Whether this continues, however, and for how long, remains an open question.

STUDENT LIFE

This section is primarily an analysis of data from the national survey on American secondary schools, *High School and Beyond*. We present our findings on the 1980 cohort of sophomores questioned again as seniors in 1982. Data from our field studies are relegated to a supporting role.

This section is divided into four parts:

- A brief description of Catholic secondary schools based on the *HS&B* data that includes a discussion of some major differences among Catholic schools as well as how these schools compare as a group to public schools;
- A brief examination of the institutional factors associated with quality secondary schools;
- A detailed exploration of the nature of the effects of Catholic secondary schools on students' academic achievement, post-secondary educational plans, and affective and social development;
- A discussion of selected findings from our research on Catholic school effects.

The first two parts provide background information for the third part. The third part is the heart of this section and the centerpiece of our entire research effort. Since we summarize in a few pages a voluminous amount of statistical analysis, the fourth part is added to highlight selected findings that are of general interest.

CATHOLIC SECONDARY SCHOOLS AND THEIR STUDENTS

Our primary research interest in analyzing the *HS&B* data was to explain the nature of student development in Catholic secondary schools and the personal and institutional factors associated with that development. We considered four factors: the personal, family, and academic background of the student; the characteristics of the school attended by the student; the nature of the student's engagement with the school from the perspective of student attitudes, behavior, academic and co-curricular activities; the academic, affective, and social development of the individual student. Several constructs enter into the composition of these factors. Each construct is measured through a series of variables. Figure 5.1 presents the theoretical and measurement framework used in structuring this investigation.

To facilitate the presentation of the analytic results in part three, a brief description is provided of Catholic schools and their students based on *HS&B*. Some of what we report is documented by both Greeley and Coleman *et al.*[1] Nevertheless, we include it because it is important data for understanding our results.

1. *Op. cit.*

FIGURE 5.1. Variables Which Comprise the Major Constructs and Factors

FACTORS	CONSTRUCTS	VARIABLE DESCRIPTION	VARIABLE NAME
Personal, Family, and Academic Background	Academic Background	• A composite variable consisting of information on: —College ambitions in grade 8 —Repeated elementary school grade(s) —Remedial group placement at high school —Entrance exam required for high school entry	Academic Background
	Elementary School Experience	• Catholic, public, or mixed	Catholic Elementary Experience
	Demographic Characteristics	• Sex • Race (Hispanic, black, white) • Religion (Catholic, non-Catholic)	Female Black Hispanic Non-Catholic
	Social Class	• A composite consisting of information on: —family income —parental education —parental occupation —selected household possessions	Student's Social Class
	Financial Sacrifice	• School tuition as a percent of family income	Financial Sacrifice
	Religiosity	• A composite variable consisting of: —Frequency of attendance at religious services —Student thinks of self as religious person	Religiousness
	Family Structure	• One or two parents in household • Number of siblings • Home ownership	Single Parent Household Family size Home Ownership
	Parental Involvement	• Parental engagement with the student (monitor school work, speak with student about personal matters, know student's whereabouts) • Parental involvement in school matters (PTA, parent-teacher conferences, school projects)	Parental Engagement with Student Parental Involvement with School
School Characteristics	School Social Context	• Average social class level • Social class diversity of school • Percent black enrollment • Percent Hispanic enrollment	School's Social Class Social Class Diversity % Black Students % Hispanic Students
	Disciplinary Climate	• Principal's report of discipline problems • Students' reports about frequency of abusive behavior (school average) • Incidence of discipline problems (school average)	School Discipline Problems Abusive Behavior in School School Disciplinary Climate
	Academic Climate	• Students' attitude toward academics, (school average) • Students' use of time for academic purposes, (e.g. more homework, less TV, less paid work) • Peer attitudes towards academics	Students' Academic Attitude Students' Academic Use of Time Peer Academic Attitude
	Fiscal Resources	• Tuition (1980) • Per-pupil expenditure (1980) • School size • Student/faculty ratio	Tuition Per-Pupil Expenditure School Size Student/Faculty Ratio
	Faculty Resources	• Starting salary level (1980) • Percent of faculty with advanced degrees • Percent of teachers at school 10 years or longer (faculty stability) • Percent of faculty who leave each year other than retirement (faculty turnover) • Principal's reports about problems with staff	Starting Faculty Salary % Faculty with Advanced Degrees % Faculty > 10 Years at School % Annual Faculty Turnover Incidence of Staff Problems

FACTORS	CONSTRUCTS	VARIABLE DESCRIPTION	VARIABLE NAME
	School Religious Climate	• Average religiousness of students	Ave. Religiousness of Students
		• Percent non-Catholic enrollment	% Non-Catholic Students
		• Percent from Catholic elementary schools	% Catholic Elementary Students
	Academic Organization	• Diversity of academic tracks (academic, general, vocational)	Multiple Academic Tracks
		• Ability grouping in grade 12	Ability Grouping
		• Hours of instruction per year	Hours of Instruction
Students' Academic Attitudes, Behavior, and Courses Taken	Academics Attitudes	• Student interest in academics	Interest in Academics
		• Student attitude toward getting good grades	Attitudes Toward Good Grades
	Non-Academic Attitudes	• Attitude toward athletes	Attitude Toward Athletes
		• Attitude toward social life	Attitude Toward Social Life
		• Student doesn't feel safe in school	Doesn't Feel Safe in School
	Behaviors Relating to Academics	• Number of unexcused absences in 3-month period	Number of Unexcused Absences
		• Hours per week spent on homework	Homework, Hrs./Wk.
		• Hours per weekday spent watching television	Television, Hrs./Day
		• Hours per week of paid work	Paid Work, Hrs./Wk.
		• Student's disciplinary record	Number of Discipline Problems
		• Readiness for instruction (books, supplies arrive on time)	Readiness for Instruction
	Co-curricular School Activities	• Participation in athletics	Athletic Participation
		• Leadership positions held in co-curricular activities	Leadership Experiences
		• Executive experiences, such as opportunities to address class groups	Executive Experiences
	Course Enrollment	• Years of math courses	Years of Mathematics
		• Years of science courses	Years of Science
		• Years of social studies and history	Years of Social Sciences
		• Number of business courses	Number of Business Courses
		• Years of foreign language courses	Years of Foreign Language
		• Number of vocational courses	Number of Vocational Courses
		• Remedial math or English Program (senior year)	Remedial Program Enrollment
		• Honors math or English Program (senior year)	Honors Program Enrollment
Outcomes of Schooling	Academic Achievement	• Vocabulary (measured in both sophomore and senior years)	Vocabulary Achievement
		• Reading (measured in both sophomore and senior years)	Reading Achievement
		• Mathematics (measured in both sophomore and senior years)	Mathematics Achievement
		• Science (measured in both sophomore and senior years)	Science Achievement
		• Writing (measured in both sophomore and senior years)	Writing Achievement
		• Civics (measured in both sophomore and senior years)	Civics Achievement
		• Grade-point average (senior year)	Senior GPA
	Affective and Social Development	• Locus of control, i.e. student's sense of control over social environment (composite based on mean of sophomore and senior year responses)	Locus of Control
		• Self-concept (composite based on mean of sophomore and senior year responses)	Self-Concept
		• Community orientation (composite based on mean of sophomore and senior year responses)	Community Orientation
		• Family orientation (composite based on mean of sophomore and senior year responses)	Family Orientation
		• Attitude about women's role in career and family (composite based on mean of sophomore and senior year responses)	Traditional Role of Women
	College Orientation	• Level of educational aspirations (measured in the senior year)	Educational Plans
		• Self-assessment of ability to complete college (measured in the senior year)	College Ability

Catholic schools are diverse. Two structural features contribute significantly to this diversity. The first is the sex composition of the school (male only, female only, or coed). The second is the school governance structure or sponsorship arrangement (religious order, parish, or diocesan).

Over 40 percent of Catholic secondary schools are single-sex institutions. Of these, approximately 60 percent are all-female.[2] In terms of governance, 40 percent of all Catholic secondary schools are sponsored by religious orders with the remaining 60 percent sponsored by dioceses and parishes. Since it is not possible to distinguish between diocesan and parish schools on the basis of *HS&B* data, this section combines the two. (For a further discussion of governance differences, see Section 8.)

In addition, sex composition and sponsorship are themselves related. The large majority of religious order secondary schools are single-sex. Only two of 84 in the *HS&B* sample are religious order coeducational schools. This fact combined with the results of other analyses described below to convince us of the need to join these two classifications into a single set of related categories: boys' religious order schools, other boys' only schools, girls' religious order schools, other girls' only schools, and coed schools. Table 5.1 indicates the substantive differences among these five groups on four items: the background of students; school characteristics; student engagement with the school; patterns of academic achievement and college plans.

Religious order school students tend to be more affluent and have higher achievement and college aspirations. These schools generally have higher tuitions and attract a larger proportion of public elementary school students. In comparison, coed school students tend to be more religious. A larger percentage of them also have a Catholic elementary school background.

There are other substantive differences across schools that result directly from sex composition. Regardless of the type of school attended, girls tend to spend more time on homework, watch less television, are less likely to work for pay or have a discipline problem, and have more positive attitudes towards academics. On the other hand, boys are more likely to have leadership roles around the school and take more mathematics and science courses.

The girls' non-religious order school is distinct from the other four. The average social class and income level is considerably lower and is actually less than the national average for public schools. The attitudes of students toward academics are less positive. Over half the girls are enrolled in a vocational or general program. This is a distinct contrast with the general pattern among Catholic schools where over 70 percent of the students are in an academic program. The overall achievement level and percentage of students with college plans in this type school are lowest among the five groups. Here, too, they are lower than the average for public school students.

2. Market Data Retrieval, Westport, Ct., personal communication, 1982.

TABLE 5.1. Mean Differences for Selected Variables Between Catholic and Public Schools and Among the Five Types of Catholic Schools

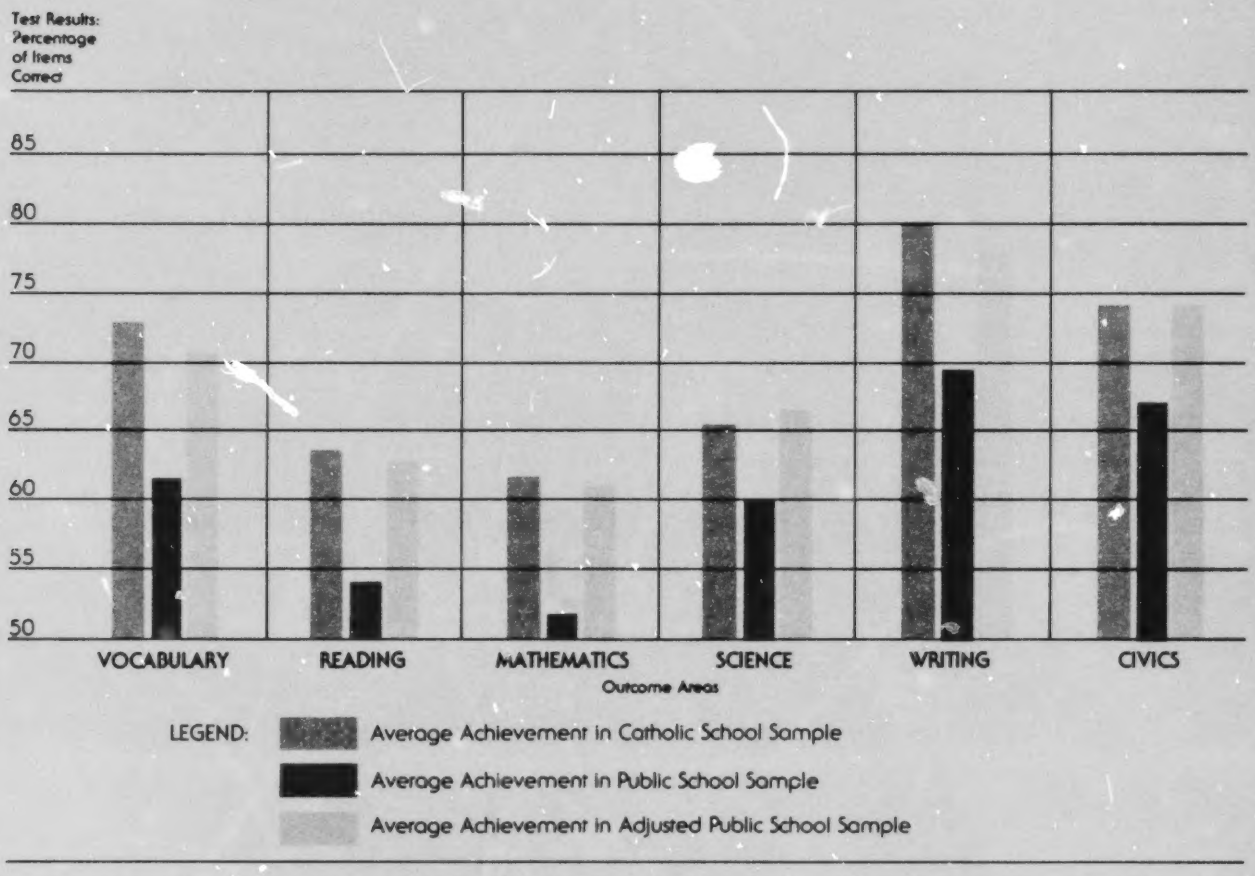
	BOYS' RELIGIOUS ORDER	BOYS' DIOCESAN & OTHER	GIRLS' RELIGIOUS ORDER	GIRLS' DIOCESAN & OTHER	COED CATHOLIC SCHOOLS	TOTAL CATHOLIC SAMPLE	PUBLIC[1] SCHOOL SAMPLE	ADJUSTED[2] PUBLIC SCHOOL SAMPLE
STUDENTS BACKGROUND	n=286[4]	n=258	n=392	n=219	n=900	n=2050	n=2352	
Family Income	$37,896	$31,791	$35,306	$25,431	$33,757	$33,596	$27,851	$33,385
Social Class[3]	.266	.093	.166	−.711	.014	0	−.518	—
Religiousness[3]	−.168	.094	.025	−.355	.108	0	−.723	−.614
Parental Involvement in School Matters	.011	−.084	.149	.032	.053	0	−.218	.009
Parental Engagement With Student	−.034	.012	−.041	−.322	.066	0	−.445	−.347
% Black Enrollment	.076	.069	.028	.027	.037	.042	.105	.069
% Hispanic Enrollment	.125	.092	.091	.149	.072	.089	.127	.081
% From Catholic Elementary Schools	.524	.506	.461	.699	.617	.572	.021	—
% Non-Catholic Enrollment	.116	.091	.126	.145	.120	.121	.750	—
SCHOOL CHARACTERISTICS	n=11[4]	n=11	n=17	n=11	n=34	n=84	n=94	
School Size	830	767	470	577	502	546	845	—
% Annual Teachers Turnover	.104	.095	.149	.066	.128	.124	.072	—
% Teachers at School 10 Years or More	.305	.313	.174	.223	.147	.184	.383	—
Tuition (1980)	$ 1,101	$ 993	$ 1,049	$ 695	$ 687	$ 833	—	—
Per-Pupil Expenditure	$ 1,634	$ 1,354	$ 1,312	$ 796	$ 1,320	$ 1,310	—	—
Student/Teacher Ratio	20.1	19.4	15.9	18.3	18.0	17.8	17.6	—
% Teachers With Advanced Degrees	53.8	68.6	44.2	37.0	36.6	42.3	40.9	—
First Step, 1980 Salary Scale	$ 8,754	$ 9,187	$ 8,483	$ 8,365	$ 8,669	$ 8,635	$10,273	—
% Students in Vocational Program	.023	.048	.063	.343	.103	.102	.282	—
% Students in General Program	.135	.187	.162	.242	.189	.183	.338	—
% Students in Academic Program	.843	.765	.774	.414	.707	.715	.380	—
STUDENT ENGAGEMENT WITH THE SCHOOL								
Homework, Hrs./Wk.	5.862	5.000	7.532	6.178	5.565	6.144	4.114	5.372
Days Absent in 3 Months, Unexplained	2.288	2.154	1.849	2.217	2.277	2.221	3.410	3.101
Television, Hrs./Weekday	2.676	2.323	2.090	2.538	2.9[illegible]	2.451	2.705	2.428
Readiness for Class[3]	.083	−.157	.127	.055	−.040	0	−.026	.035
Incidence of Discipline Problems[3]	.314	−.021	−.043	−.146	−.027	0	.509	.328
% in Leadership Positions	.539	.554	.409	.417	.465	.473	.487	.580
Peer Attitudes Towards Academics[3]	.073	.089	.201	−.208	.036	0	−.380	.106
Years of Mathematics Courses	3.793	3.713	3.365	2.748	3.119	3.189	2.066	2.899
Years of Science Courses (chemistry, physics)	1.154	1.067	.729	.623	.782	.820	.547	.888
Years Foreign Language Courses	2.356	1.325	1.792	1.069	1.400	1.717	1.104	1.372
OUTCOMES								
Senior Achievement Composite[5]	58.5	57.0	56.3	53.5	55.2	55.8	50.9	55.0
% Planning to Graduate from College	83.3	75.1	74.5	44.0	62.4	66.5	41.4	68.6

NOTES:
[1]The public school sample is an 11% random sample of schools from HS&B.
[2]Public school results adjusted to resemble the social class and academic program distributions in Catholic schools.
[3]Standardized variables centered on weighted means and standard deviations from total Catholic sample.
[4]Sample sizes are unweighted.
[5]An academic achievement composite created by HS&B consisting of senior year achievement in Vocabulary, Reading, and Mathematics. It is scaled to a mean of 50 and a standard deviation of 10 for the entire HS&B sample.

Students in Catholic secondary schools display more positive academic attitudes and behavior and enroll in

The data presented in Table 5.1 support the conclusion stated earlier: there are major differences between students in Catholic and public schools. Figure 5.2 shows that these differences are carried over into academic achievement. For example, the average Catholic school senior had 73 percent of the *HS&B* vocabulary items correct. In the public school sample, the average was 62 percent correct. The average Catholic

FIGURE 5.2. Composition of Academic Achievement in Catholic and Public Secondary Schools (Senior Year)



school senior had 61 percent of the mathematics items correct. For public schools seniors, the figure was 52 percent. Similar differences were found in reading, science, writings, and civics (compare bars 1 and 2 for each panel in Figure 5.2).

Caution is necessary in interpreting observed differences. Catholic secondary schools students are slightly more affluent than their public school counterparts. They are also more likely to be enrolled in an academic program (see Table 5.1). While Catholic school students generally display higher levels of achievement, these and other differences can be attributed to these two considerations. We employed the statistical technique known as standardization to compensate for differences in social class and academic program enrollments. In essence, standardization provides an estimate of the results we would have obtained if the public sample had the same social class and academic program distribution as the Catholic sample.

The last column in Table 5.1 presents the public school results after adjustment for social class and academic program enrollment. The differences are reduced substantially on most background and school engagement variables. Similarly, in comparing the first and third bars for each panel in Figure 5.2, the large initial Catholic school advantage in academic achievement is reduced dramatically. The academic achievement of Catholic school seniors is now only slightly higher than their public school counterparts in most academic areas. In science achievement, Catholic school seniors are slightly below the adjusted public school sample.

Before proceeding to part two, a disclaimer is in order. The comparisons of public and Catholic school students just presented in their adjusted and unadjusted form are strictly for descriptive purposes. They are given only to demonstrate a pattern of relationships existing among the factors of interest in this research. There has been much controversy over the adequacy of any statistical method to compensate for prior differences between nonequivalent groups such as students in Catholic and public schools. The standardization analyses presented do not fully respond to these criticisms. Furthermore, it is not clear that any analysis of *HS&B* for this purpose can be immune to such criticisms. We do not offer the standardization analyses nor intend that they be used for purposes of comparative judgments about the relative efficacy of Catholic and public schools.

INSTITUTIONAL FACTORS ASSOCIATED WITH QUALITY IN CATHOLIC SECONDARY SCHOOLS

Student-teacher ratios and the percentage of teachers with advanced degrees are similar in Catholic and public schools. Catholic schools are comparable to public ones, then, when considering these factors, frequently viewed by the general public as indicators of quality.

The average Catholic secondary school enrolls about 550 students. Over 30 percent of the schools, however, enroll fewer than 300 students.[3] Unless well endowed, a secondary school of this size finds it difficult to offer a full range of academic courses. It also finds it difficult to provide necessary instructional supports such as science laboratories.

3. See the *United States Catholic and Elementary Secondary Schools, 1982-83*.

community. It can also increase the stress on the fiscal resources.

There appears to be an ideal school size: neither too large to inhibit the strong sense of community discussed in Section 2, nor too small to offer a full curriculum and adequate instructional facilities. Goodlad[4] suggests an ideal size for a secondary school is between 500 and 600 students. The current distribution of Catholic schools is within this range. The resource constraints under which most Catholic schools operate (see Section 7), may push the economic side of the equation in the direction of a larger size. Recent data indicate that Catholic secondary schools are growing larger.[5]

In general, the organization of fiscal and human resources in Catholic schools involves several tradeoffs. There are only a few of these schools which can offer all the features of endowed private schools. These tend to run diverse programs on vast, well-equipped campuses with a small school size, low student/faculty ratios, and relatively high faculty salaries. Most Catholic schools have to choose from among these alternatives in developing their mission.

There are certain structural features of Catholic schools that work to their benefit. The emphasis on an academic core and the modest range of electives minimizes the stress on resources. Similarly, most Catholic schools do not have the sophisticated physical plants typically found in an affluent suburban public school or a financially independent school.

The most significant differentiation across schools occurs in the manner they choose to deploy human resources. Boys' schools, for example, are considerably larger than girls' schools. They also operate with larger class sizes. When combined with a relatively high tuition by Catholic school standards, these features allow boys' schools to pay teachers higher salaries. In comparison, girls' religious order schools pay lower salaries. They also are smaller in size and have a more favorable student-teacher ratio. In essence, boys' schools strive for economic efficiency—larger schools focusing almost exclusively on delivering an academic program to students in relatively large groups. The girls' schools, on the other hand, more closely resemble the private academy—smaller schools with smaller classes and a more intimate, personal environment.

4. John L. Goodlad, *A Place Called School*, New York: McGraw-Hill, 1984.

5. See the *1982-83 Statistical Report*, *op. cit.* It is likely two factors are at work: enrollment expansion in some schools and a disproportionate rate of closings among smaller schools. Our analyses of the fiscal constraints on Catholic schools suggest that smaller schools are more likely to be forced to close. At the same time, stronger schools are currently enjoying great popularity. Some are probably increasing their enrollments to contain tuition costs. Unfortunately, we know of no data source that permits separating out these two effects.

Annual teacher turnover in Catholic secondary schools is higher, and faculty stability defined as the percentage of teachers at the school with more than 10 years of experience is considerably lower than comparable measures in public schools. The low salaries in Catholic

Both our field research and the *HS&B* analyses reported later in this section indicate that faculty instability is a major institutional problem for many Catholic secondary schools. *HS&B* data indicate 12.3 percent of the teachers in these schools turnover each year. This compares with 8.8 percent for public schools. Over 15 percent of Catholic secondary schools have annual teacher turnover rates in excess of 20 percent. Turnover rates of 30 percent are not that rare.

On balance, there may be benefits that accrue from a modest turnover rate. Our field interviews with new teachers suggest these individuals bring vitality and high levels of commitment to the school. Both of these can act to refresh the faculty and renew the spirit of the school.

Our *HS&B* analyses suggest the key problem is not teacher turnover per se but faculty instability. Only 17.8 percent of the teachers in Catholic secondary schools

schools are a major factor contributing to teacher turnover and faculty instability.

have 10 or more years experience in those schools. The comparable figure for public schools is almost 36 percent. Our analyses indicate a stable faculty is one of the major institutional factors that have direct effects on student achievement. Further, our field research suggests that a stable faculty core is also essential to preserving the traditions of the school and inculcating them to each new cohort of students and teachers. Thus, annual turnover is not necessarily problematic. In fact, it may be beneficial as long as there is a substantial core faculty that maintains the integrity of the academic program and transmits the tradition of the school.

The major impediment to building a stable faculty core appears to be low teacher salaries, particularly at the top of the salary scale.[6] Historically, religious staff have constituted the stable faculty core for Catholic schools. As a result, the effects of a low lay salary schedule were minimal. As the schools are staffed by more lay persons, low salary schedules become increasingly problematic. In some of the secondary schools visited, the salary scale peaked at $13,000. This raises questions about the ability of Catholic schools to maintain a stable lay faculty regardless of their dedication or their commitment to institutional values. This area should concern all those involved in the governance of Catholic schools. The long term institutional and fiscal consequences are far-reaching.[7]

6. *HS&B* is not well designed to examine this issue. The only survey question on faculty salaries concerns starting salaries. Our field and literature research, however, indicates that starting salaries are of far less importance than the top of the salary scale. See Section 7 for more details.

7. Obviously, one could have too much of a good thing. Calcification of staff is likely to be as problematic as severe instability. *HS&B* data suggest this is not an issue for most Catholic schools. The most stable Catholic faculties, those in boys' schools, are equivalent to an average public school.

A constellation of factors is associated with schools thought to be of high quality by the students enrolled in them. These schools are characterized by greater fiscal resources and a more stable staff. The curriculum has a strong academic emphasis. There are relatively few discipline problems. Students manifest positive attitudes toward academics. They also spend more time in academic pursuits. Parental involvement and the social class of the student body are also high. A similar set of

We created and used three measures to gauge institutional quality:

- An overall school assessment based on students' responses to survey questions on a range of topics from the adequacy of the physical plant to the quality of school spirit;
- An evaluation of teacher quality based on students' reports about the quality of academic instruction and specific characteristics of their teachers (e.g., level of commitment, patience, and understanding);
- Principals' reports about problems with staff regarding the level of their commitment and absenteeism.

While the *HS&B* sample provides an extensive data base on individual Catholic school students, it is a modest sample (84 schools) for examining statistical relationships among school variables. We did conduct various exploratory analyses at this level. The sample size, though, is not sufficient to develop a complete model of institutional quality. As a result, caution is warranted in interpreting the reported statistical relationships among school variables.

In general, the nature of school climate, including both academic and disciplinary components, is strongly associated with institutional quality. This appears to be a solid finding. In addition to the statistical association of school climate with the institutional quality measures, we also found school climate to be a powerful predictor of students' attitudes, behavior, and academic and co-curricular activities. It even has a modest direct relationship with the outcomes of schooling. This is discussed at more length in the next part.

Institutional factors emerged as important when we examined principals' reports about staff absenteeism and lack of commitment. Such problems are more frequent in larger schools where there is a high incidence of student discipline problems, less parental involvement, fewer fiscal resources, and a weak academic climate.

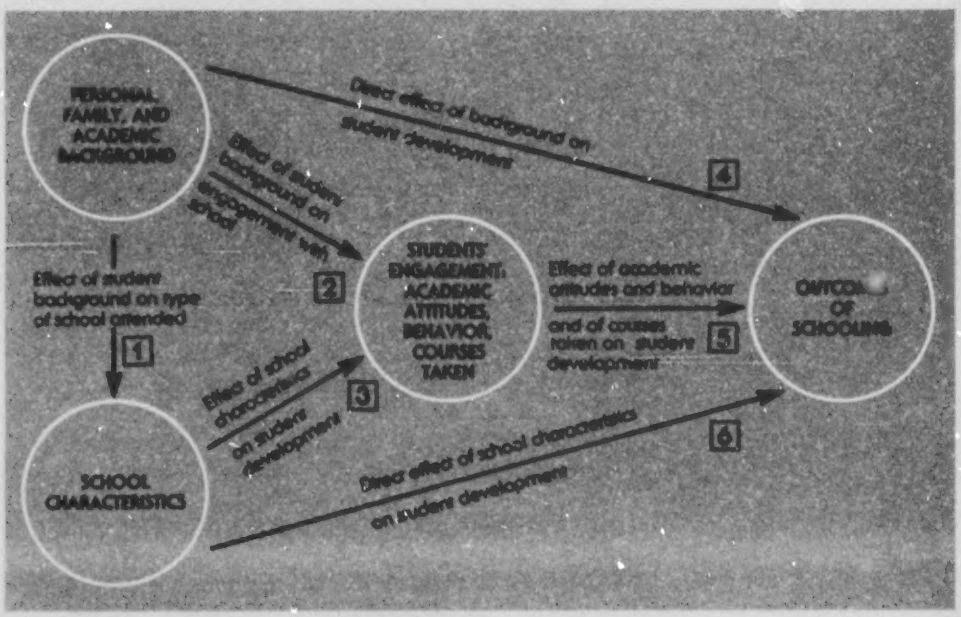
The effect of school climate, then, appears to be extensive. For example, the incidence of student discipline problems is the strongest correlate of staff turnover, even stronger than starting salary level. These data seem quite consistent with our field observations. This is especially true of our finding that teachers in Catholic schools are willing to make considerable sacrifices to work in an environment that is personally supportive and that has students committed to learning.

THE NATURE OF THE EFFECTS OF CATHOLIC SECONDARY SCHOOLS ON STUDENTS' ACADEMIC ACHIEVEMENT, POST-SECONDARY EDUCATIONAL PLANS, AND AFFECTIVE AND SOCIAL DEVELOPMENT

The Analytic Model

We wanted to determine which aspects of Catholic secondary schools—their climate, organization, staffing, and resources—might be important contributors to student development. To assist us in this task, we constructed a general model of school effects based on previous research in the public sector. The model is presented in Figure 5.3. It is different from the traditional "input-output" models typically used in school effects research. These differences are described in what follows.

FIGURE 5.3.
Analytic Model for Analysis of Student Development


PERSONAL, FAMILY, AND ACADEMIC BACKGROUND
Direct effect of background on student development
4
Effect of student background on engagement with school
2
Effect of student background on type of school attended
1
STUDENTS' ENGAGEMENT, ACADEMIC ATTITUDES, BEHAVIOR, COURSES TAKEN
Effect of academic attitudes and behavior and of courses taken on student development
5
OUTCOMES OF SCHOOLING
Effect of school characteristics on student development
3
6
SCHOOL CHARACTERISTICS
Direct effect of school characteristics on student development

Identifying school effects is complicated by the fact that different types of students attend different kinds of schools. In particular, the family, personal, and academic background of students influences the kind of secondary school that they might attend (arrow 1 in Figure 5.3). This background also has some direct effect on the students' school performance (arrow 4). As a result, any simple comparison of achievement levels across schools becomes difficult to interpret. For example, let us compare two schools where achievement is high in one but low in the other. Assume the high achievement school has abundant resources and highly qualified teachers. It also tends to enroll students from more affluent families. On the other hand, the low achievement school has fewer resources. It tends to enroll more disadvantaged children. To what should we attribute the observed differences in achievement between schools? Are we seeing the effects of variations in school policies and resources? Or, are they merely differences that result from the characteristics of students who happen to attend different schools?

There are other complications. The involvement of students in school life—their attitudes and behavior, the academic and co-curricular activities in which they engage during their secondary years—are instrumental in advancing learning. To preview the argument presented in what follows, students' engagement in the instructional process plays a central role. How family background and school characteristics affect students' learning depends largely on the degree to which these factors influence the nature of the students' engagement in the educational process. For this reason, the student engagement factor is central to the analytic model presented in Figure 5.3. The various elements which constitute this factor have strong effects on the outcomes of schooling (arrow 5). Further, many of the effects of both family background and school factors on student development work through these elements (arrows 2 and 3).

Thus, to assess the effects of school characteristics on student development involves more than identifying direct linkages between school factors and achievement (arrow 6). In fact, an exclusive focus on arrow 6 is misdirected. Our analyses indicate that much of the effect that Catholic schools have on student development occurs through a two stage process.[8] School characteristics influence the nature of students' engagement. This, in turn, is the causal factor influencing the outcomes of schooling. Analytically, this requires both identifying the important student engagement variables and determining how students' background and school characteristics influence these variables. Thus, in our analytic model, the focus is on arrows 2, 3, and 5.

Fortunately, statistical methods such as regression analysis provide some help in sorting out these relationships.[9] They permit us to take into account that any relationship of interest—e.g., the association between a school's tuition rates and students' science achievement—may exist within a network of many other relationships—e.g., the effects on science achievement of student's academic background and the number of science courses taken. In particular, the regression technique helps assess the unique contribution of each student background, school resource, and student

8. For a discussion of the two stage model of how school resources can affect student achievement see R. Murnane, "Interpreting the Evidence on School Effectiveness", *Teachers College Record*, 83, 1, Fall 1981, 19-35. The authors also wish to acknowledge the helpful comments from Richard Murnane to an earlier draft of this section.

9. As indicated in the introductory section, there is little research on the effects of Catholic secondary schools. Although research on public schools is extensive, it seemed imprudent to assume that these findings would necessarily apply to Catholic schools. It seemed important, therefore, to take an exploratory approach to the *HS&B* data lest we miss something of significance. For this reason, we relied heavily on simple statistical techniques such as frequency distributions, crosstabs, breakdowns, and regression analyses. Due to limited financial resources, we have undertaken no structural equation modelling (e.g., LISREL) to date. We hope to test our results through such analyses in the future.

engagement variable to each of the outcomes of schooling. This is accomplished while taking into account all the other relationships present in the data.

Because of space limitations in this summary document, we cannot fully recount the details of all analyses undertaken. Instead, this presentation is organized around three questions. The answers to them constitute the core of our findings. These questions are:

- How do students' backgrounds influence the type of school they attend?
- How do students background and school characteristics combine to influence the nature of students' engagement in the school?
- How do background, school characteristics, and student engagement factors combine to influence the outcomes of schooling?

Before answering each of these questions, a caveat is in order. Statistical analyses search for relationships among individual variables. They address questions such as, "Is the tuition level associated with mathematics achievement after controlling for average differences in family income across schools?" From a substantive point of view, however, we are often more interested in assessing the strength of the relationships among the constructs—e.g., what effect do school fiscal resources have on academic achievement? While statistical analyses can be quite helpful in establishing associations among individual variables, drawing conclusions about causal relationships among constructs is a very complex teask. It inevitably involves at least a modest degree of interpretation and inference. It is in the latter regard that we rely substantially upon our field observations. Without them, we would confront an extremely complex and sometimes confusing set of statistical relationships without concrete experiences to guide interpretation.

Effects of Family Background on the Type of School Attended

Our analyses suggest some families choose Catholic secondary schools because they are Catholic. Others choose them for their academic quality. Social class has a significant role to play in the latter choice but not the former. Significant sex differences also appear. Boys are more likely to attend schools that possess a strong academic emphasis and a record of high achievement. Girls, though, are more likely

Our first set of analyses on this issue sought to identify the distinctive characteristics of students who attend the five different types of Catholic schools discussed earlier. Discriminant analysis was the statistical technique employed for this purpose. It assisted us in separating two factors which are at work here. The first was social class. This identified a group of relatively affluent students more likely to come from public elementary school. For these families, the tuition involved was less of a financial sacrifice. These students are most likely to be found in boys' religious order schools and least likely to be found in girls' non-religious order schools.

The second factor focused on a religious dimension. It identified students with the following characteristics: those who express positive views about religion; those from larger families; those less likely to be minority and more likely to be Catholic; those who attended Catholic elementary schools. These students are more likely to be found in coed schools than the single-sex schools.

In addition to the discriminant analyses, regression techniques were used to examine the relationship of family, personal, and academic background to various school level constructs—school social class, disciplinary, academic and religious climate, and fiscal and human resources. The findings are displayed in Figure 5.4. Each column identifies the characteristics of students most likely to be found in a particular school. For example, females, students from higher social class families,

to choose schools for their safe environment and religious emphasis.

and those from families where tuition entails a greater degree of financial sacrifice are likely to attend schools where the incidence of discipline problems is low (see the second column in Figure 5.4). Blacks, however, are less likely to attend schools of this type. In general, the "+" and "−" signs indicate the direction and magnitude of the relationships between student background characteristics and school characteristics where particular students are *more* (a "+" sign) or *less* (a "−" sign) likely to be found.

FIGURE 5.4 Aspects of Student and Family Background That Are Related to Various Characteristics of Schools

EXPLANATORY VARIABLES	HIGH AVERAGE SOCIAL CLASS	LOW INCIDENCE DISCIPLINE PROBLEMS	STRONG ACADEMIC CLIMATE	STRONG ACADEMIC EMPHASIS	HIGH ACADEMIC ACHIEVEMENT	STRONG RELIGIOUS CLIMATE	MORE FISCAL RESOURCES	MORE HUMAN RESOURCES	PERCEIVED HIGH QUALITY TEACHING
BACKGROUND FACTOR									
Academic Background				++		−	+		+
Catholic Elementary Experience	− − −		− −	− − −	− − −	+ + +	− −	− − −	−
Female	− − −	+ + +		+ + +	− − −	+ +		− − −	− −
Black		− −			− − −	− −			
Hispanic						+			+
Non-Catholic						−		−	+
Student's Social Class	+ + +	+ + +	+ + +	+ + +	+ + +	− −	+ + +	+ + +	+ + +
Financial Sacrifice	+ + +	+	+ + +	+ +	+ + +		+ + +	+ + +	+ + +
Religiousness						+ +		− − −	− −
Single Parent Household									
Family Size						+ +	− − −	− −	−
Home Ownership	+ +								
Total % of Variance Explained	**.228**	**.066**	**.107**	**.168**	**.200**	**.177**	**.099**	**.140**	**.066**

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+ + +	− − −	$p \leq .001$
+ +	− −	$p \leq .01$
+	−	$p \leq .05$

A pattern of results emerged from the regression and discriminant analyses performed on the *HS&B* data. Higher social class and a greater degree of financial sacrifice predicts attendance at schools with a stronger academic climate and emphasis, a low incidence of discipline problems, relatively high levels of fiscal and human resources, high academic achievement, and high perceived institutional quality. In general, students from public elementary schools are more likely to choose these schools. On the other hand, there are different variables associated with selecting schools with a strong religious climate: Catholic elementary school experience, personal religiousness, being Catholic, female, and Hispanic, and coming from a large family.

Regression results also indicate sex differences in selecting a Catholic secondary school. Boys are slightly more likely to attend stronger academic schools. Girls are more likely to enroll in schools with a strong religious climate and fewer discipline problems. These results suggest that families apply different criteria in selecting a secondary school for their children. The emphasis is academic achievement for boys, and a safe social environment for girls.

Effects of Student Background and School Factors on Students' Engagement in the Life of the School

Students' personal, family, and academic background explains many of the observed differences in the nature of students' engagement in the school. School factors, however, have a comparable impact.

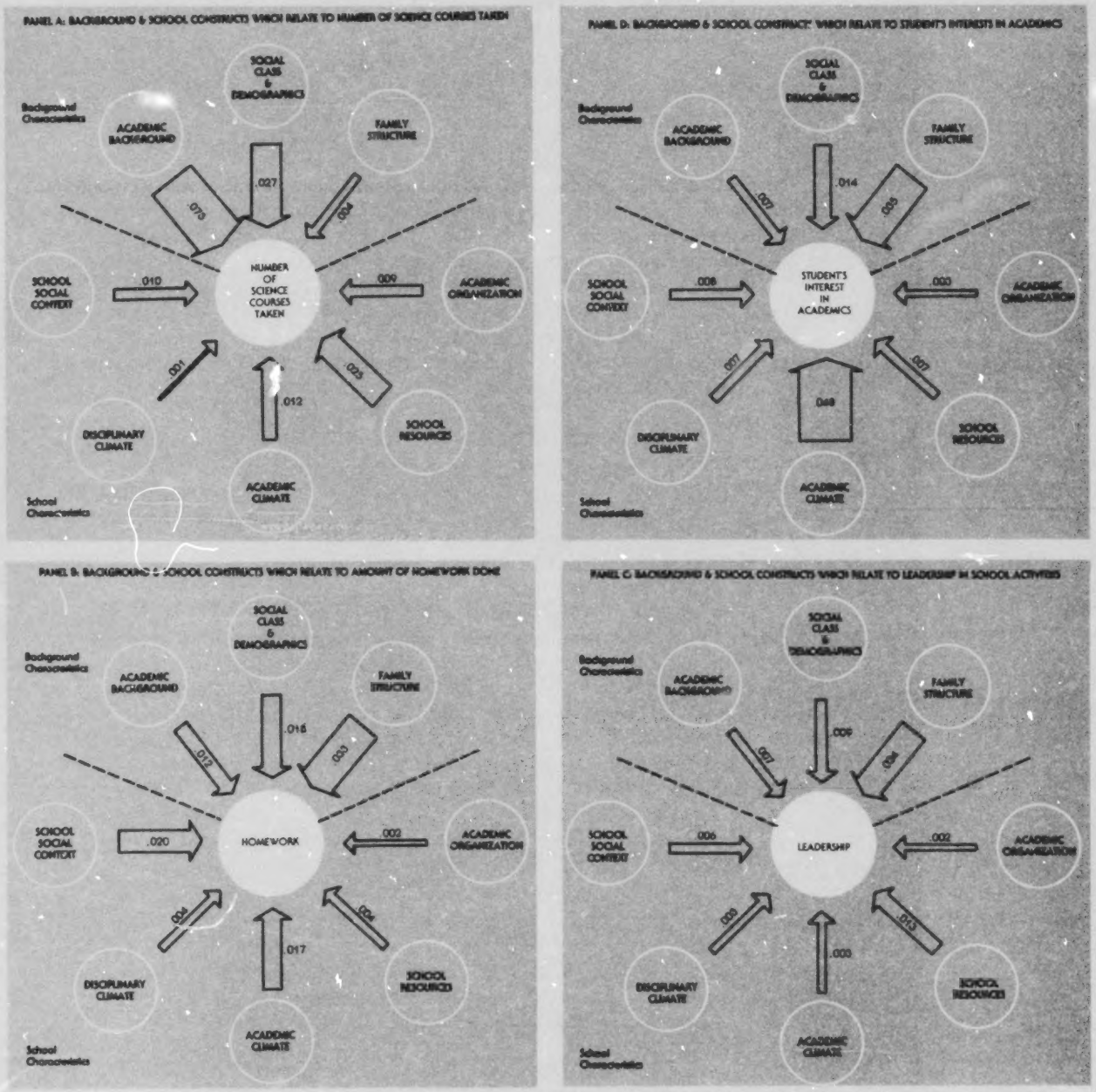
The relative influence of school and background factors on a student's engagement in the life of the school depends upon the student variable in question. Figure 5.5 presents results from a sample of four student engagement variables: number of science courses taken (an academic program variable); amount of homework done (a measure of academic behavior); leadership positions held (a measure of co-curricular involvement); student's interest in academics (an academic attitude measure). We illustrate the results for these variables because each is an important predictor of academic achievement. Further, as a set, these results represent the observed variation in relationships.

In Figure 5.5, the width of the arrow and the numbers attached to them indicate the relative strength of each construct's influence over the student engagement variable. For example, academic background has a strong influence on science course enrollment (relationship strength of .073).[10] Social class and school resources also make substantial contributions. In terms of interest in academics, the strongest influence comes from academic climate (relationship strength .048), followed by family structure (relationship strength .035).

Family background, especially religiousness and social class, and the degree of parental involvement with their child's schooling, have substantial effects on academic attitudes and behavior. School factors other than academic climate have only a modest influence. School resources, however, play a more substantial role as we focus on academic course enrollments and students' engagement in various co-curricular activities. Academic background plays the strongest role in predicting course enrollments. On the other hand, family background, particularly parental involvement with the school, is the strongest predictor of the student's engagement in various co-curricular activities.

10. The index used as a measure of "relationship strength" is the incremental percentage of variance explained when a cluster of predictor variables, e.g. family structure, is entered last in the equation. The results can be slightly misleading because no adjustment is made for varying reliability across the outcome variables. Since the latter constrains the amount of variance that any factor can explain, comparisons across analyses can be misleading. Similarly, errors in the independent variables can cause problems in interpreting the relative contribution of various constructs that predict a particular outcome.

In principle, the structural relationship parameter estimated by LISREL adjusts for these problems. Originally we intended to undertake such analyses as a sensitivity check on our final results. Unfortunately, we lack the necessary financial support for computer time. We hope to be able to test the results reported here through LISREL modelling in the future.



NOTE: Numbers represent the unique percent of variance in the outcome explained by each construct. Width of arrows is proportional to that percentage. Percent of explained variance in each model is as follows:

-Science Course Enrollment	.221	-Interest in Academics	.188
-Homework	.182	-Leadership	.095

The Effects of Student Background, School Characteristics, and Students' Engagement Factors on Student Development

Students' engagement in the life of the school—their attitudes about school and friends, their use of time, and their academic and co-curricular activities—are the major predictors of both academic achievement and educational aspirations beyond high school. These attitudes and behaviors maintain an important but somewhat diminished role in fostering social and affective development, where a student's background has a more substantial influence.

The effects of student background and school characteristics on student development depend largely on how each of these factors influences a student's engagement in the life of a school.

We wanted to compare the relative effects of background, school, and student engagement factors on student development. To do this, we conducted parallel analyses using the same analytic model for academic achievement (sophomore and senior year), affective and social development (a composite across the two years), and college orientation (senior year only). The results are displayed in Figure 5.6. The width of the arrows and the numbers attached to them indicate the relative strength of the relationship between any two factors. For example, background has a sizeable effect on sophomore academic achievement (notice the wide arrow with a value of .107 in Panel A). It has a greatly reduced effect, though, by the senior year (the comparable arrow in Panel B is much narrower and has a value of only .025.)

The major difference between models for sophomore and senior academic achievement is that the senior model includes data on courses taken and co-curricular activities. Both, particularly courses taken, have powerful effects on academic achievement. Since teaching courses is the major activity of a school, there is a certain reassuring simplicity in this finding.

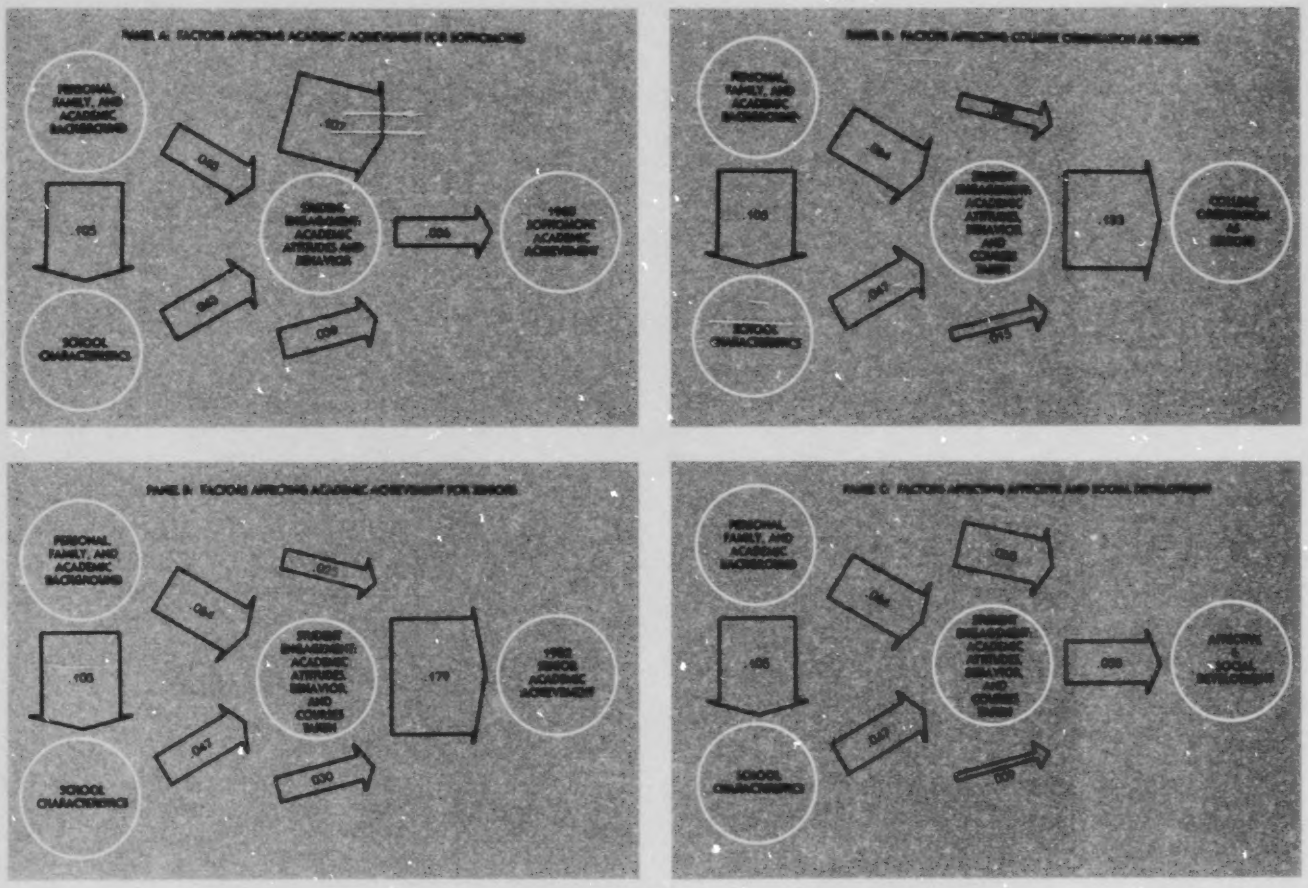
The role of personal, family, and academic background, powerful in predicting sophomore achievement, is greatly diminished once we account for the school activities of students. While background has less of a direct effect on achievement, it continues to play an important role through its influence over how students engage in school life. In fact, the strength of the relationship increases from sophomore to senior year (from .043 to .064). In addition, as noted earlier, background influences the type of school attended (a relationship strength of .105). This, in turn, influences student engagement (a relationship strength of .047).

Results for the college orientation outcome are similiar to those for predicting senior academic achievement. The factor consisting of students' attitudes, behavior, and course enrollments is again the most important (a relationship strength of .133). The direct effects of schools on college orientation (a relationship strength of .015) is somewhat diminished relative to the effects of background (a relationship strength of .020).

The pattern is quite different in the social and affective area. Personal, family, and academic background has the largest direct effect (relationship strength of .060) on these outcomes. In addition, background has a substantial indirect effect through its influence over the school type attended and the nature of students' engagement with that school. While the effects of students' attitudes, behavior, and course enrollment are diminished, they remain substantial (relationship strength of .055). The effects of school characteristics on social and affective development are modest. They work primarily through their influence over students' attitudes, behavior, and involvement in academic and co-curricular activities.

Figures 5.7 through 5.10 summarize the results of the regression analyses for each outcome area: academic achievement in the sophomore (Figure 5.7) and senior (Figure 5.8) year); college orientation Figure 5.9); social and affective development (Figure 5.10). Each column identifies the student background, school characteristics,

FIGURE 5.6: Relative Effects of Background, School Characteristics, Student Attitudes, Behavior, and Courses on the Outcomes of Schooling



TECHNICAL NOTE: Each picture is actually a synthesis of results across the several variables within each outcome construct. The same set of background, school, and student engagement variables was employed in each analysis in attempting to predict the various outcomes of schooling. The numbers on each arrow are unique explained variances associated with one factor as it predicts the other. The actual number is an average across the several regressions associated with each outcome factor.

and student engagement variables that influence some aspect of student development. As noted earlier, the "+" and "−" signs indicate the direction and magnitude of the relationships of background, school, and student engagement variables to each of the schooling outcomes. Factors associated with positive student outcomes are marked with a "+" sign. Factors that indicate less development are marked with a "−" sign.

Sophomore academic achievement. Academic background and social class for both the student and school have a substantial direct effect on most areas of sophomore academic achievement. The degree of financial sacrifice required for a student's attendance at a Catholic secondary school is also an important predictor of

FIGURE 5.7. Aspects of Background, Schools, and Student Engagement That Are Related to Academic Achievement (Sophomore Year)

EXPLANATORY VARIABLES	VOCABULARY	READING	MATHEMATICS	SCIENCE	WRITING	CIVICS
BACKGROUND FACTOR						
Academic Background	+++	+++	+++	+++	+++	+++
Catholic Elementary Experience	++	++		−	++	++
Female			− − −	− − −	+++	
Black	−					
Hispanic						
Non-Catholic						
Student's Social Class	+++	+++		+++	+++	+++
Financial Sacrifice	++	+++	+++	++	+++	
Religiousness						
Single Parent Household		−				++
Family Size			+			
Home Ownership			++			
Parental Engagement with Student						
Parental Involvement with School						− −
SCHOOL CHARACTERISTICS FACTOR						
School's Social Class	+		+++	+++		
Social Class Diversity						
% Black Students						
% Hispanic Students						
School Disciplinary Problems	− −			− −	− − −	
Students' Academic Attitudes						
Students' Academic Use of Time						
Peer Academic Attitudes						
Tuition						
Per-Pupil Expenditure						
School Size			+	+	+++	
Student/Faculty Ratio						
Starting Faculty Salary						
% Faculty with Advanced Degrees						
% Faculty > 10 Years at School	+++	+++	+++	+++	+++	
% Annual Faculty Turnover						
Incidence of Staff Problems	−	− − −	− − −	− − −	−	− − −
Ave. Religiousness of Students						
% Non-Catholic Students			+			
% Catholic Elementary Students						
Multiple Academic Tracks						
Ability Grouping			− −	− − −	− − −	
Hours of Instruction						
STUDENT'S ENGAGEMENT WITH SCHOOL						
Interest in Academics	+++	+++	+++	+	++	++
Attitude Toward Good Grades						
Attitude Toward Athletes						
Attitude Toward Social Life						
Doesn't Feel Safe in School		−		− −	−	
Number of Unexcused Absences			−		−	
Homework, Hrs./Wk.			+			
Television, Hrs./Day	− − −	− − −	− − −	− − −	− − −	− − −
Paid Work, Hrs./Wk.						
Number of Discipline Problems	−		− − −	− − −	− − −	− − −
Readiness for Instruction						
Total % of Variance Explained	**.291**	**.254**	**.270**	**.261**	**.303**	**.205**

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+++, − − −	$p \leq .001$
++, − −	$p \leq .01$
+, −	$p \leq .05$

FIGURE 5.8. Aspects of Background, Schools, and Student Engagement That Are Related to Academic Achievement (Senior Year)

EXPLANATORY VARIABLES	VOCABULARY	READING	MATHEMATICS	SCIENCE	WRITING	CIVICS
BACKGROUND FACTOR						
Academic Background	+++	+++	+		+++	++
Catholic Elementary Experience	+			−−	+++	++
Female			−−−	−−−	+++	
Black						
Hispanic						−−
Non-Catholic	−		−	−		−
Student's Social Class	++			++	++	
Financial Sacrifice		+	+++		+++	
Religiousness						
Single Parent Household						
Family Size						
Home Ownership						
Parental Engagement with Student						
Parental Involvement with School						
SCHOOL CHARACTERISTICS FACTOR						
School's Social Class	+++	+	+	+++		
Social Class Diversity					−	−−
% Black Students						
% Hispanic Students						
School Disciplinary Problems	−−−	−−		−−−	−−	
Students' Academic Attitudes						
Students' Academic Use of Time						
Peer Academic Attitudes						
Tuition						
Per-Pupil Expenditure			++		++	+
School Size						
Student/Faculty Ratio						
Starting Faculty Salary						
% Faculty with Advanced Degrees				−−−		
% Faculty > 10 Years at School	++	+++	++	++	++	
% Annual Faculty Turnover						
Incidence of Staff Problems						
Ave. Religiousness of Students						
% Non-Catholic Students	−				−−	
% Catholic Elementary Students						−
Multiple Academic Tracks	−−			+		
Ability Grouping				−−		−
Hours of Instruction						
STUDENT'S ENGAGEMENT WITH SCHOOL						
Interest in Academics						
Attitude Toward Good Grades						
Attitude Toward Athletes						
Attitude Toward Social Life						
Doesn't Feel Safe in School						
Number of Unexcused Absences			−−	++		
Homework, Hrs./Wk.				−−		
Television, Hrs./Day				−		
Paid Work, Hrs./Wk.						
Number of Discipline Problems	−−−	−−−			−	
Readiness for Instruction						
Athletic Participation	−−−	−−−	−−−	−−−		
Leadership Experiences			++			
Executive Experiences	++	++		+++	++	
Years of Mathematics	+++	+++	+++	+++	+++	+++
Years of Science	+++	+++	+++	+++	+++	++
Years of Social Studies						
Number of Business Courses						
Years of Foreign Language						
Number of Vocational Courses	−−	−−	−	−	−−	−−−
Remedial Program Enrollment	−−−	−−−	−−−	−−−	−−−	−−−
Honors Program Enrollment	+++	+++	+++	+++	+++	+++
Total % of Variance Explained	**.409**	**.354**	**.547**	**.369**	**.373**	**.267**

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+++, −−− $p \leq .001$
++, −− $p \leq .01$
+, − $p \leq .05$

FIGURE 5.9. Aspects of Background, School, and Student Engagement That Are Related to College Orientation

EXPLANATORY VARIABLES	EDUCATIONAL ASPIRATIONS	SELF-ASSESSMENT OF COLLEGE ABILITY
BACKGROUND FACTOR		
Academic Background	+++	+
Catholic Elementary Experience	−−	
Female		
Black	+	
Hispanic		
Non-Catholic		
Student's Social Class	+++	
Financial Sacrifice		−
Religiousness		
Single Parent Household		
Family Size		
Home Ownership		
Parental Engagement with Student		
Parental Involvement with School		
SCHOOL CHARACTERISTICS FACTOR		
School's Social Class	++	+++
Social Class Diversity		
% Black Students		
%Hispanic Students	+	
School Disciplinary Problems		−
Students' Academic Attitudes		
Students' Academic Use of Time		
Peer Academic Attitudes		
Tuition		
Per-Pupil Expenditure		
School Size		
Student/Faculty Ratio		
Starting Faculty Salary		
% Faculty with Advanced Degrees		
% Faculty > 10 Years at School		
% Annual Faculty Turnover		
Incidence of Staff Problems		
Ave. Religiousness of Students		
% Non-Catholic Students		
% Catholic Elementary Students		−
Multiple Academic Tracks		
Ability Grouping		
Hours of Instruction		
STUDENT'S ENGAGEMENT WITH SCHOOL		
Interest in Academics		
Attitude Toward Good Grades		
Attitude Toward Athletes		
Attitude Toward Social Life		
Doesn't Feel Safe in School		−−
Number of Unexcused Absences	−	
Homework, Hrs./Wk.	+++	
Television, Hrs./Day		
Paid Work, Hrs./Wk.		−−−
Number of Discipline Problems		−−
Readiness for Instruction		
Athletic Participation	+	+
Leadership Experiences	+++	+++
Executive Experiences	+++	++
Years of Mathematics	+++	+++
Years of Science	++	
Years of Social Studies		
Number of Business Courses		
Years of Foreign Language		
Number of Vocational Courses	−−	−−
Remedial Program Enrollment		−−−
Honors Program Enrollment	+	+
Total % of Variance Explained	**.397**	**.241**

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+++, −−−	$p \leq .001$
++, −−	$p \leq .01$
+, −	$p \leq .05$

FIGURE 5.10. Aspects of Background, Schools, and Student Engagement That Are Related to Social and Affective Development

EXPLANATORY VARIABLES	LOCUS OF CONTROL	SELF-CONCEPT	COMMUNITY ORIENTATION	FAMILY ORIENTATION	TRADITIONAL ROLE OF WOMEN
BACKGROUND FACTOR					
Academic Background	+++				
Catholic Elementary Experience			−		
Female	++	−−		+	−−−
Black	+++		++	−	−−−
Hispanic	−				
Non-Catholic					
Student's Social Class					
Financial Sacrifice		−−			
Religiousness			+	+++	+
Single Parent Household				+	
Family Size					+
Home Ownership					
Parental Engagement with Student	+++	+++	+	+++	+
Parental Involvement with School			+		+
SCHOOL CHARACTERISTICS FACTOR					
School's Social Class			−		
Social Class Diversity					
% Black Students					
% Hispanic Students					
School Disciplinary Problems		−−			
Students' Academic Attitudes					
Students' Academic Use of Time					
Peer Academic Attitudes					
Tuition					
Per-Pupil Expenditure					
School Size					
Student/Faculty Ratio					
Starting Faculty Salary					
% Faculty with Advanced Degrees					
% Faculty > 10 Years at School					
% Annual Faculty Turnover					
Incidence of Staff Problems					
Ave. Religiousness of Students					
% Non-Catholic Students					
% Catholic Elementary Students					++
Multiple Academic Tracks		+++			
Ability Group			+		
Hours of Instruction					
STUDENT'S ENGAGEMENT WITH SCHOOL					
Interest in Academics	++		+++		
Attitude Toward Good Grades		+	++	++	
Attitude Toward Athletes			++		++
Attitude Toward Social Life					
Doesn't Feel Safe in School	−−−	−−−		−	
# of Unexcused Absences			+		
Homework, Hrs./Wk.			++	++	
Television, Hrs./Day	−−−		+	++	−
Paid Work, Hrs./Wk.					
Number of Discipline Problems	−−			−−	
Readiness for Instruction					
Athletic Participation					
Leadership Experiences			++		
Executive Experiences	++	+	++	−	−−
Years of Mathematics	++				
Years of Science					
Years of Social Studies					
Number of Business Courses					
Years of Foreign Language					
Number of Vocational Courses					
Remedial Program Enrollment					+++
Honors Program Enrollment					
Total % of Variance Explained	**.238**	**.121**	**.144**	**.164**	**.221**

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+++, −−−	$p \leq .001$
++, −−	$p \leq .01$
+, −	$p \leq .05$

academic success. In both the sophomore and senior year, a pattern of higher achievement can be expected from students whose families expend a larger percentage of income for tuition.

Students' use of time is also important. Students who spend a great amount of time watching television or who have unexcused absences from school or other discipline problems generally have lower levels of achievement. On the other hand, an interest in academics and more time spent on homework contribute to academic success.

A number of school factors also need to be considered. Larger schools with more stable faculties, an absence of staff problems, and a positive disciplinary climate where students feel safe all seem to foster higher achievement. Academic achievement in some areas, particularly in mathematics and science, is usually lower in schools that use ability grouping. These differences persist through senior year. There are also effects of race, sex, religion, and elementary school experience on selected academic outcomes. Each of these will be discussed in a subsequent section of this report.

Senior academic achievement. By senior year, the picture has changed. The most important contributors to academic achievement are students' academic courses and co-curricular activities. More mathematics and science courses as well as enrollment in an honors programs have a strong positive effect on achievement across all areas. Enrollments in vocational courses and remedial programs predict lower levels of achievement. Executive and leadership experience, such as speaking before a group or presiding over a school club, are all associated positively with achievement. Athletic participation, however, has a negative effect.

By senior year, the effects of students' attitudes and their use of time are diminished substantially. We surmise not that these considerations are no longer important. Rather, their effects are manifested through actual academic and co-curricular school activities. In addition, for students who continue to have discipline problems a lower pattern of achievement can be expected.

The effects of school factors remain relatively constant from sophomore to senior year. Again, a positive disciplinary climate contributes to high achievement. Senior achievement levels also appear higher in schools with more stable staffs and higher tuitions. These findings provide further support for the argument, introduced earlier, that the quality of some Catholic secondary schools appears to suffer because of limited fiscal resources.

Student-teacher ratios and the amount of scheduled instruction, two other school features of considerable interest, show no consistent pattern in the *HS&B* data. This should not be interpreted as indicating these features do not affect student achievement. The problem here is analytic: these variables are confounded with school type. For example, boys' religious order schools have less scheduled instruction and higher student-teacher ratios, but also have higher achievement. The latter is due in large measure to the stronger academic and family background of students who attend these schools. While statistical methods are intended to specify structural relationships from spurious ones, this is not always possible given the limitations of a data set. This is one of those occasions.[11] We believe the *HS&B* data cannot clarify the real effects in this area.

College orientation. The student's social class and the social class of the school is a strong predictor of aspirations for higher education. Academic background also

11. Data on a larger set of schools would help substantially. An analysis stratified by type of Catholic school would provide a better basis for addressing these concerns.

contributes substantially to both educational aspirations and the student's self-assessment of college ability. The remaining background and student variables play a modest role in explaining college orientation.

Strongly associated with college orientation are the ways students use their time as well as their co-curricular and academic activities. More time on homework, less time in paid work, less absenteeism, and fewer discipline problems are associated with aspirations for higher education and students' assessments of their ability to complete college. This is true also of leadership, executive experiences, and participation in athletics. Finally, enrollment in an honors program and more mathematics and science courses contribute in like fashion.

Social and affective development. Statistical analyses of these outcomes show less explanatory power than for the other outcome areas. This is due to the difficulty associated with obtaining good measures for these constructs and to the fact that the phenomena of interest may be less stable. In addition, the results of our analyses are less consistent across the specific outcomes because the variables in this domain are not strongly related to each other. Since there are few patterns here, our summary comments are selective.

Parents' involvement with the school and with their childrens' academic endeavors has strong effects here. When parental engagement is high, students report a stronger sense of control over their environment, a more positive self-concept, a stronger community and family orientation, and more traditional attitudes about women's role. More religious students display similar patterns on the community, family, and women's role variables. In general, all of the family structure variables—one- vs. two-parent families, family size, and home ownership—play significant roles in predicting community and family orientation, and attitudes toward women's role.

There are also substantial sex and race differences on these outcomes. For example, girls have a higher sense of control over their environment, lower self-concept and community orientation, a stronger sense of family, and are much less supportive of a traditional role for women. Blacks, too, are higher on locus of control, self concept, and community orientation. They are less oriented, however, toward family. Finally, they display less traditional attitudes about women's roles.

The student attitude, behavior, and academic course variables are important predictors in the social and affective areas. The specific variables that are important, though, depend upon the particular outcome. Finally, several important predictors in other outcome areas have a reduced role here. These include academic background, elementary school experience, the level of financial sacrifice, and social class.

Gains in achievement and college orientation from sophomore to senior year. In addition to the analyses described above, we conducted a brief investigation of the factors associated with gains from sophomore to senior year in academic achievement and college orientation.[12, 13] We looked at these data in three ways. The most direct approach was a simple gains analysis: the sophomore score is subtracted from the senior score to create a measure of individual gain across the two-year period.

12. Given our research purpose, these are the most important analyses from a conceptual perspective. Unfortunately, the data necessary for these analyses were available rather late. As a result, we did not have the opportunity to investigate them to the same depth as the other data discussed here. Thus, we have relegated these analyses to a supporting role. We only report findings that have some corroboration through other analyses.

13. We performed change analyses on the social and affective measures as well. It appears there is little systematic change score variance in these outcomes. Thus, very few statistical relationships could be found. We decided not to report on these outcomes for this reason.

This gain measure was then treated as an outcome variable in a regression model identical to those employed on the separate sophomore and senior outcomes.[14]

In addition to simple gains, we computed gains in a transformed metric. The technical details here are somewhat complex.[15] We note, however, that the transformed gain involves an adjustment in the observed gains to compensate for some statistical problems associated with the simple gain score. These transformed gains provide a more conservative source of evidence for the argument that follows. A third approach was also employed. It enters the sophomore score as another predictor variable in a senior achievement model. The results are quite similar to the transformed gains analyses. We will not summarize them separately. The interested reader is referred to the technical report for more details.

14. Past applications of simple gains analysis have often shown that the subjects who initially were lowest made the biggest gains. While this may reflect a pattern of real change, it is well known that in part it is an artifact of the gain score itself. Since there is no generally agreed upon best way to solve this, good data analysis practice suggests that several techniques be used. The results can then be compared for consistency. We have done this.

15. We used a negative exponential growth model to transform the sophomore and senior scores. It has the characteristic that the expected rate of gain is proportional to the distance from a perfect score. Except for a scale factor, it is identical to the learning rates used by Coleman *et al., op. cit.*

Changes in achievement and college orientation from sophomore to senior year present a complex pattern. Academic course of study contributes substantially to gains. A positive academic climate, a low incidence of discipline problems, and more school resources also contribute. Inconsequential are academic and social class background and the social class of the school. Our results suggest that in some areas, the more disadvantaged students are making the biggest gains.

The patterns of results displayed in Figure 5.11 is complex. It suggests that the influences of school and background are competing with each other. In part, they cancel each other out. Some results are identical to those already noted earlier. For example, enrollments in science and mathematics courses are strong predictors of gains across all academic areas. A few variables previously not related strongly to achievement are now more influential. For example, there are stronger negative effects on academic achievement and college aspirations for students who work while in school. On the other hand, academic background, the student's social class, and the social class of the school do not appear to be of any consequence. In fact, there are indications it is the more disadvantaged students who make bigger achievement gains in several outcome areas. We find students with discipline problems in their sophomore year making larger gains in science and mathematics. In addition, students reporting weak interest in academics as sophomores make larger gains in vocabulary. Their educational aspirations also increase disproportionately. These results are also evident in the transformed gains analysis, a very conservative estimate of gain for those who start out low.

In looking at school factors, we find that the academic and disciplinary climate of a school are also associated with academic gains. The level of per-pupil expenditure contributes to both academic achievement and college orientation. Academic tracking is negatively related to gains in vocabulary, mathematics, and writing. Although there are some inconsistencies,[16] the effects of school-level variables on academic gains are similar to those found in analyses of senior year achievement.

16. There is one apparent anomaly that deserves comment. The largest gains occur with fair consistency in schools where principals report a higher incidence of staff problems in 1980, the sophomore year for our student cohort. Other analyses summarized earlier indicate that sophomore achievement tends to be lower in these schools. Unfortunately, *HS&B* did not collect data from principals in 1982. Thus, we cannot judge whether the gains indicate the effect of a school improvement effort or some regression artifact. For this reason, we decided not to interpret this result.

FIGURE 5.11. Aspects of Background, Schools, and Student Engagement That Are Related to Sophomore-to-Senior Gains

EXPLANATORY VARIABLES	VOCABULARY	READING	MATHEMATICS	SCIENCE	WRITING	CIVICS	EDUCATIONAL PLANS	COLLEGE ABILITY
BACKGROUND FACTOR								
Academic Background				−−				−−
Catholic Elementary Experience								+
Female			−					
Black								
Hispanic								
Non-Catholic			−					
Student's Social Class		−	+					−−−
Financial Sacrifice			++					
Religiousness								
Single Parent Household								
Family Size							−	
Home Ownership								+++
Parental Engagement with Student								
Parental Involvement with School	−				−			
SCHOOL CHARACTERISTICS FACTOR								
School's Social Class			−			−−		
Social Class Diversity								
% Black Students								
% Hispanic Students								
School Disciplinary Problems	−−	−						
Students' Academic Attitudes								
Students' Academic Use of Time								
Peer Academic Attitudes								
Tuition								
Per-Pupil Expenditure						+		+
School Size	−			−		+		
Student/Faculty Ratio								
Starting Faculty Salary								
% Faculty with Advanced Degrees								−−
% Faculty > 10 Years at School								
% Annual Faculty Turnover								
Incidence of Staff Problems (1980)	+++	+++		+++	+			
Ave. Religiousness of Students								
% Non-Catholic Students			−		−		−	
% Catholic Elementary Students								
Multiple Academic Tracks	−−		−		−			
Ability Grouping						−−		
Hours of Instruction								
STUDENT'S ENGAGEMENT WITH SCHOOL								
Interest in Academics (1980)	−−						−−−	−−−
Attitude Toward Good Grades								
Attitude Toward Athletes								
Attitude Toward Social Life								
Doesn't Feel Safe in School								
# of Unexcused Absences							−−−	−
Homework, Hrs./Wk.	++					+		+
Television, Hrs./Day								
Paid Work, Hrs./Wk.	−							
Number of Discipline Problems	−	−	+	+				
Readiness for Instruction								
Athletic Participation	−−−						+++	
Leadership Experiences								
Executive Experiences				++				
Years of Mathematics	++	+++	+++	+				−
Years of Science			+++	+++	++		−−−	
Years of Social Studies								
Number of Business Courses								
Years of Foreign Language								
Number of Vocational Courses								
Remedial Program Enrollment					−			
Honors Program Enrollment						+		
Total % of Variance Explained	.089	.067	.166	.054	.035	.047	.069	.120

TECHNICAL NOTE: The '+' and '−' entries on this figure are based on the nominal significance levels of each variable in the final regression model. The symbols represent the following probability levels:

+++, −−−	$p \leq .001$
++, −−	$p \leq .01$
+, −	$p \leq .05$

SELECTED FINDINGS

Thus far, our remarks focus on identifying basic structural relationships among background, school resources, student engagement, and the outcomes of schooling. We now provide additional detail on selected findings that we believe are of broad interest.

The Diminished Influence of Social Class on Achievement in Catholic Secondary Schools

Our analyses support the findings of Coleman, et al. and Greeley that social class is less predictive of achievement in Catholic than in public schools. We conclude academic policy is a key factor in this regard. In particular, since Catholic schools generally require a substantial core of academic courses for all students, a major source of variation that often perpetuates social class effects is removed. Social class does influence choice of school attended. Once inside the school, though, its influence is substantially reduced.

Both Coleman, ***et al.*** and Greeley conclude that social class is much less strongly associated with achievement in Catholic than in public schools. This finding is salient particularly when viewed from the perspective of equality of educational opportunity. In simple terms, academic achievement in Catholic schools depends much less on the background that a student brings to these schools.

Since our analyses focus on factors that influence achievement within Catholic schools, the attention devoted to Catholic—public school comparisons is limited. Nevertheless, our research on the relationship of social class to achievement across public and Catholic schools provides further empirical support for the findings just cited.[17]

We concentrated in our research on attempting to understand the ways in which social class influences achievement in Catholic schools. An important finding is that the nature of the influence seems to shift over the course of the secondary years. The results displayed in Figure 5.6 indicate the direct effect of background on achievement is reduced substantially between sophomore and senior year. The strength of this relationship in senior year is only one-quarter the size of the sophomore year. This lessening of the direct importance of background factors is also true for its various components including social class. The results of our change analyses provide further corroboration. On several achievement and college orientation outcomes, the largest gains accrued to the more disadvantaged students.

Figure 5.12 displays the regression model estimates of the direct effects of social class on each of the six areas of academic achievement. These represent the achievement differences that might be expected in comparing two students alike in every respect except class—one is lower-middle class, and the other is upper-middle class.[18] The height of the bar indicates the size of the advantage that accrues in the latter case.

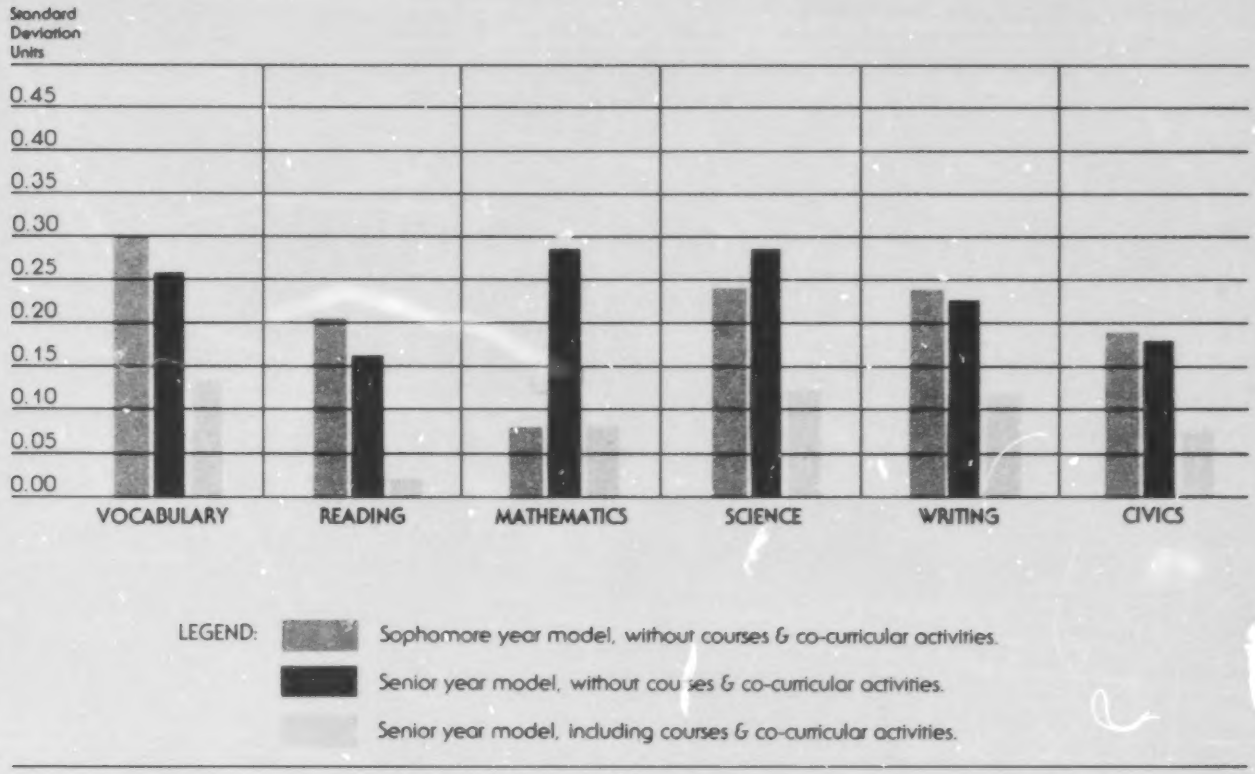
Each panel in Figure 5.12 provides three estimates of the social class effect. The first bar in each panel provides the estimated effect in sophomore year. The second bar in each panel provides the estimated effect in senior year before we account for students' course enrollments. The third bar in each panel provides the estimated effect under the full senior year model with courses taken.

Summarizing across the six academic areas, the average direct effect of social class on sophomore year achievement is .21 standard deviation units. This increases

17. Evidence on this point is presented in a separate paper. See Anthony S. Bryk and Stephen Raudenbush, "A Hierarchical Linear Model Investigation of the Effects of Social Class on Achievement in Catholic and Public Schools," in preparation.

18. We used a 2 standard deviation criteria for establishing these two groups. This is equivalent to moving from approximately the 33rd to the 67th percentile on the SES measure.

FIGURE 5.12 The Direct Effect of Social Class on Academic Achievement in Catholic Secondary Schools



slightly to .23 standard deviation units in the senior year model which does not include students' course work. When the academic activities variables are considered, the direct effect of social class on achievement falls to .09. This reduction occurs in all academic areas.

The results in mathematics are particularly interesting. Notice the direct effect of social class on mathematics achievement. It actually increases from .08 in sophomore year to .29 in the senior year model that does not include the academic course variables. When these variables are included, the effect size drops back to .08. We see a similar but weaker version of this pattern in science achievement.

Recall that we noted in Section 2 that only two years of mathematics are usually required in Catholic schools but that some students take as many as five years. In fact, both mathematics and science are areas in the Catholic school curriculum where there is a fair degree of choice. Where choice occurs, however, the effects of social class loom larger. In particular, our analyses indicate that social class has a strong effect on the number of mathematics and science courses taken. These in turn have strong effects on mathematics and science achievement.

In general, however, much of the curriculum in Catholic secondary schools is a required academic core (see Section 2). As a result, this is a substantial constraint placed on the mechanism by which social class differences translate into achievement differences—higher social class students choosing a more academic course of

study. These results are salient because academic policies, e.g., course requirements, are in large part under the control of schools, Catholic or public. In essence, much of the total effect of social class on achievement works through factors that can be partially controlled by schools. They are, in fact, being controlled by Catholic schools.[19]

Since social class has an influence on the type of school attended, it does influence achievement in Catholic schools. As we indicated previously, more affluent students are likely to attend schools with more academic emphasis. Nevertheless, inside the school the effect of a student's social class on student achievement is greatly reduced. Our preliminary investigations indicate that the relationship strength between social class and achievement in a randomly selected Catholic school is only one-quarter the size of that within a public school.[20]

19. On balance, it could be argued that the diminished relationship between social class and achievement results from a selection effect: Catholic schools are attracting unusually motivated low-SES students. Our analyses provide support for this hypothesis. The degree of financial sacrifice attached to Catholic school attendance is related to achievement. Our analyses indicate part of the reduced relationship of social class with achievement is accounted for by the financial sacrifice variable. When this variable enters the regression equation, the standardized coefficient for SES increases by a quarter to a third. It is difficult, however, to attribute to a selection hypothesis the *decreasing* direct effect of social class to achievement from sophomore to senior year. We would need an explanation for the senior year differences that did not rely on course enrollments and could explain, in fact, the effects encountered there. It would seem that a complex argument would be required. The one presented in this summary is far simpler. It is consistent with all of the empirical evidence available to us.

20. This point is argued vigorously by John Goodlad, *op. cit.*

Sex Differences in Catholic Schools

There are noticeable sex differences in achievement in Catholic high schools. Girls have significantly lower achievement in mathematics and science and higher achievement in writing. In college orientation, however, there are no major differences. Substantially different patterns between boys and girls appear in all of the social and affective areas.

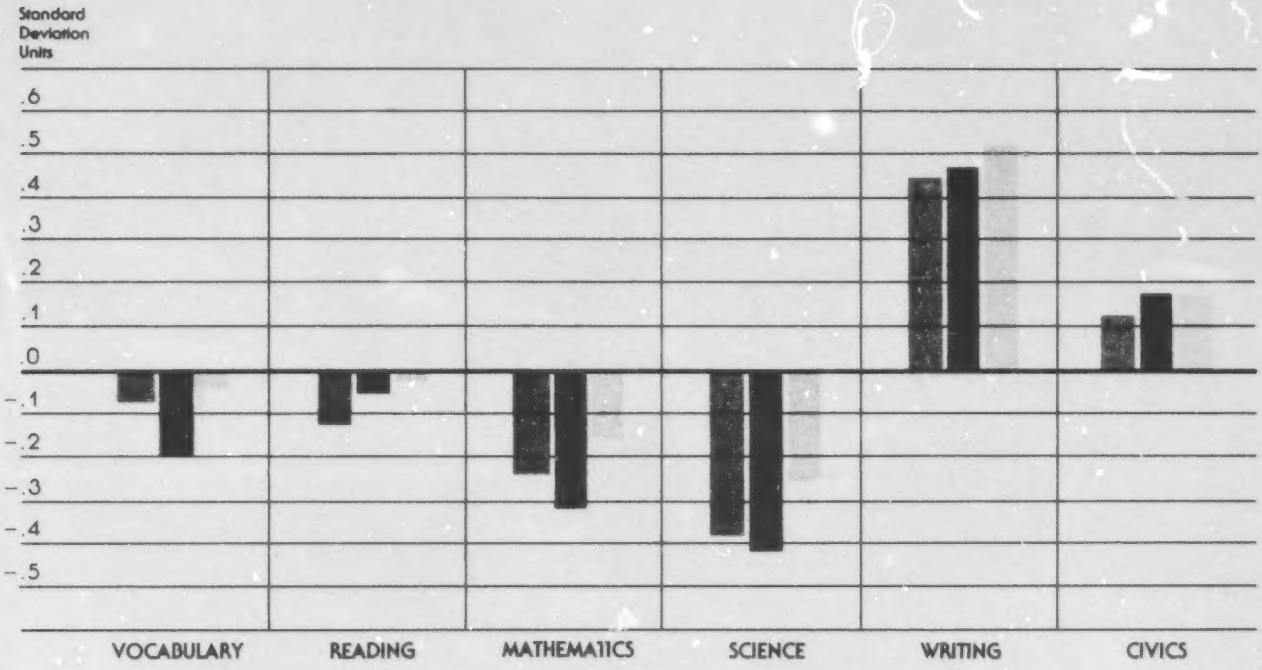
Figure 5.13 illustrates sex differences in student achievement. The first bar in each set represents the observed average difference in achievement between males and females in Catholic schools during their sophomore year. Achievement for girls is slightly below that of boys in vocabulary and reading. It is significantly below in mathematics and science. On the other hand, girls are slightly higher in civics and significantly higher in writing.

The second bar in each set represents the observed male-female difference in achievement during senior year. In general, the senior year differences follow the same pattern as the sophomore year. They do tend, though, to be magnified slightly. For example, the girls' disadvantage in mathematics and science has increased but so has their advantage in writing.

The third bar in each set represents the estimated male-female difference based on the full senior year model. The latter includes the fact there are significant sex differences in school attitudes and behavior and courses taken. Girls display greater interest in academics and spend more time on homework. They are also less likely to have discipline problems. Boys tend to take more mathematics and science courses and fewer business courses. After adjusting for these differences for attitudes, behavior, and courses, achievement in vocabulary and reading is nearly identical for boys and girls. The girls' advantage in writing and civics remains virtually unchanged. Their disadvantage in mathematics and science is halved.

Examination of the regression results indicates that the number of mathematics and science course taken plays a major role here. Approximately half the senior year differences between boys and girls in mathematics and science is due to boys taking

FIGURE 5.13. Sex Differences in Academic Achievement



NOTE: Bars below the line indicate a male advantage; bars above the line indicate a female advantage.

LEGEND:
- Observed female-male average difference in achievement, sophomore year.
- Observed female-male average difference in achievement, senior year.
- Female-male difference estimated under senior year model.

more courses in these areas. Significant sex differences in achievement remain. These do not appear attributable to differences in course enrollments. The discrepancies are similar to those found in research on sex differences in public schools.[21]

21. Researchers agree there are large differences between the sexes in mathematics and science achievement by the end of high school (Maccoby and Jacklin, *The Psychology of Sex Differences*, Stanford, CA: Stanford University Press, 1974). There has been a consistent 40-50 point advantage in favor of males on the mathematics section of the SAT test for decades. (See P.L. Classerly, "Factors Affecting Female Participation in Advanced Placement Programs in Mathematics, Chemistry, and Physics," in Fox, Brody, Tobin, *Women and the Mathematical Mystique*, Baltimore, MD: Johns Hopkins University Press, 1980). Explanations for this male advantage in mathematics and science fall into three categories: 1) those who believe it is genetic in origin (e.g., J. Benbow and Stanley, "Sex Differences in Mathematical Ability: Fact or Artifact?" *Science*, 1980, *210*); 2) those who argue it is attributable primarily to different course enrollment patterns in high school (e.g. Sherman, "Mathematics, Spatial Visualization and Related Factors: Changes in Girls and Boys, Grades Eight-Eleven," *Journal of Educational Psychology*, 1980 *72*; or Pallas and Alexander, "Sex Differences in Quantitative SAT Performance: New Evidence on the Differential Coursework Hypothesis", *American Educational Research Journal*, 1983, *20*); 3) those who believe socialization and attitudinal differences act in conjunction with course-taking to produce these effects. No research to date has been able to fully explain observed sex differences on the basis of course enrollments or social attitudes.

We found no major differences between boys and girls on college orientation. While boys have slightly higher college aspirations, the difference disappears when all the relationships within our regression model are included. In the affective and social areas, girls have a higher locus of control and a lower self-concept. They are also less community oriented but more family oriented. The observed differences here and the differences estimated under our regression model were statistically significant. Finally, girls are much less likely to affirm a traditional role for women, a result now described in more detail.

Students' Views About Women's Role

There are marked differences in attitudes toward women's roles in career and in the family among Catholic high school students. Females and blacks are less likely to see women exclusively in a traditional role. Lower social class students, students from a traditional family environment, and religiously oriented students tend to support more traditional roles for women. Students in secondary schools drawn mainly from Catholic elementary schools also do so. There appears to be little difference, however, between public and Catholic secondary school students in this area.

In order to assess students' views about the role of women in society, we created a composite measure from their responses to three survey items:

- A working mother of pre-school children can be just as good a mother as the woman who doesn't work.
- It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.
- Most women are happiest when they are making a home and caring for children.

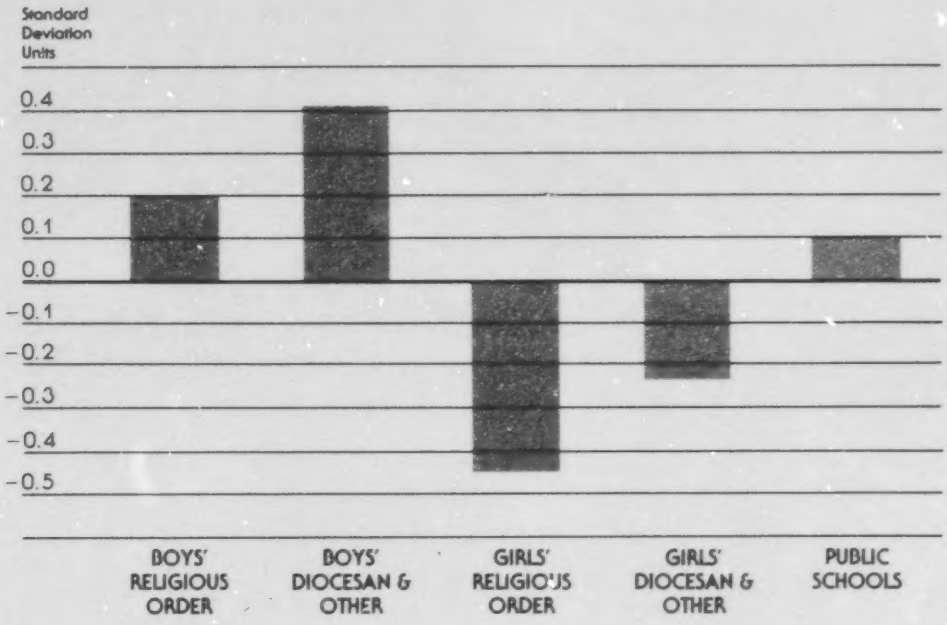
General public-Catholic comparisons show little difference on this variable before or after statistical adjustment. Comparisons between types of Catholic schools do show striking differences: the single-sex schools diverge sharply from one another. Students in all-girls' schools tend to support women working outside the home. Those in all-boys' schools hold more traditional views. Students in girls' religious order schools are especially strong in affirming that it is acceptable for women to seek careers outside the home. Students in boys' non-religious order schools lean strongly in the opposite direction. The two types of schools differ from one another by more than .80 standard deviation units (see Figure 5.14). This is considered a very large effect by most social scientists.

These differences across schools reflect in large measure general sex differences in responses to these questions. These school differences are amplified further by variations across the five school types in a wide range of student characteristics.

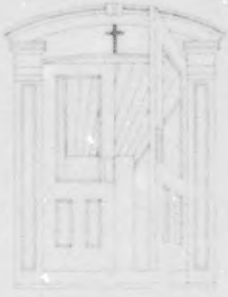
Catholic high school students' attitudes toward the appropriateness of women working outside the home differ markedly for males and females and also blacks and non-blacks. Females and blacks are much less stereotyping. Students of lower social class background stereotype more, as do students from larger families, especially two-parent families. Athletic participation and remedial program enrollment are also associated with sex-role stereotyping. Finally, students who are more religiously oriented also tend to take a traditional view of women's role.

Our analyses indicate these sex role attitudes are likely to be formed before students enter high school largely as a result of home environment and family structure. The fact that students from two-parent families and larger families seem to hold more traditional views suggests that traditional family background engenders traditional sex role values. While our field work suggests that individual schools can influence this area, *HS&B* does not provide adequate data to explore attitudinal formation. We continue to investigate these differences in attitude in our research, particularly as they relate to single-sex schools.

FIGURE 5.14.
Differences in Attitudes About Women's Role Across Types of Catholic Secondary Schools



NOTE: Bars above the line indicate support for a traditional women's role; bars below the line indicate opposition to sex role stereotyping.



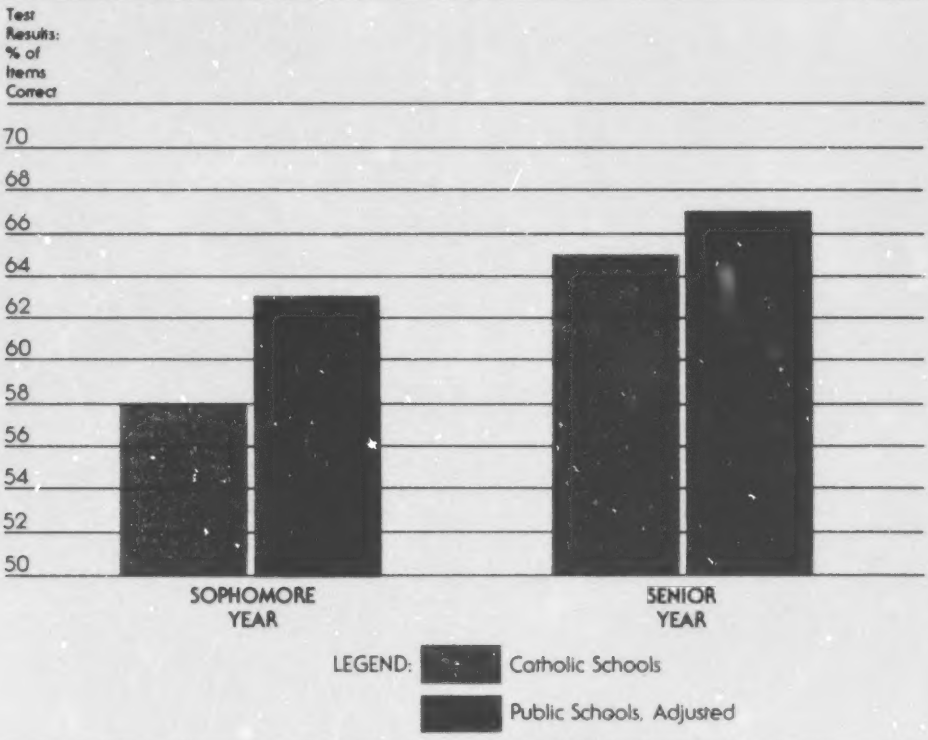
Science Achievement in Catholic Schools

Catholic secondary school achievement in science is not as strong as in other academic areas. On the one hand, the gains by Catholic students from sophomore to senior year are comparable to those by public schools counterparts enrolled in academic programs. On the other hand, the

Different patterns emerge when comparing science achievement with the five other achievement areas tested in *HS&B*. Recall that earlier we compared Catholic and public school students' senior year achievement. We observed it was only in science that the adjusted mean for public school students was slightly higher than for Catholic school students. This difference is larger in the sophomore year. After adjustment is made for social class and academic program differences between Catholic and public schools, public school sophomores averaged 63 percent correct responses and Catholic school students 58 percent. By senior year, the public school advantage diminishes to 2% (67% vs. 65%). Figure 5.15 documents the advantage of public over Catholic schools in the area of science achievement.

Our results point to Catholic elementary schools as the main cause of this discrepancy. Students who attended public elementary schools have higher science achievement as sophomores than those from Catholic elementary schools. This

FIGURE 5.15.
Comparison of Science Achievement in Catholic and Public Secondary Schools



science achievement of Catholic school sophomores is significantly lower. Our analyses suggest this is due largely to students from Catholic elementary schools entering secondary school with a distinct disadvantage in this area.

difference persists through the senior year. Section 6 of this report offers more detail on how the type of elementary school attended affects academic achievement. In brief, it appears that Catholic elementary school students arrive at the secondary level substantially disadvantaged in science. Our field research suggests elementary schools have limited resources. This resource limitation is most acute in the science area where expensive laboratory space and equipment and more highly trained faculty are required. Further, the organization of Catholic schools as kindergarten through grade 8 combined with their small size contributes to the problem. The department organization and, more importantly, the additional resources typically available in a public middle-school structure are distinct advantages for science education. While there are certain benefits to each organizational structure, small Catholic elementary schools appear disadvantaged in the area of science instruction.

Some evidence also suggests that science education is also a problem in some Catholic secondary schools. There is often less emphasis on science in smaller schools with fewer fiscal resources and lower school social class. This is the same constellation of variables that led us to conclude fiscal constraints were detracting from the institutional quality of some secondary schools. It appears these constraints are taking heavy toll in the area of science.

If Catholic schools are to maintain high academic achievement in all curriculum areas, serious attention needs to be given to the science curriculum and facilities at both the elementary and secondary level.

Section 6

73 Elementary Schools

ELEMENTARY SCHOOLS

This chapter reports our findings on Catholic elementary schools. This part of our investigation was designed as a substudy within the overall research plan. It provides an opportunity to examine the relationships between Catholic elementary and secondary schools. It also offers another perspective from which to view the secondary schools.

During the spring of 1983, we conducted field research in 13 Catholic elementary schools that sent significant numbers of their students to the secondary schools in our sample. This field investigation was comparable to the first round of field research that we conducted at the secondary level in the fall of 1982. As in the latter case, our purpose was exploratory and descriptive.

The 13 schools in our elementary school sample were founded over a long period, between 1829 and 1973. Some began in the latter part of the nineteenth and early years of the twentieth century when European immigrants moved into the cities. Others began in the 1950s as large numbers of Catholics started to move into the suburbs. The most recent schools evolved in the early 1970s through the consolidation of several schools into a single institution spread over several locations. Thus, our sample reflects three general phenomena that occurred in the foundation of Catholic schools: early immigrant schools, schools that mushroomed during the post-World War II suburban expansion, and recent consolidations that followed the contraction of financially troubled urban schools.

Our investigation focused primarily on the seventh and eighth grades. We observed classes and interviewed teachers, particularly in the areas of language arts and mathematics. We also interviewed school principals and the pastors in the supporting parishes. Both groups were helpful in providing us with a variety of data about the school, such as test scores and financial information. Over 500 questionnaires were collected from parents who had children enrolled in the eighth grade across the 13 schools. These questionnaires offer basic descriptive data on students and families, and on the factors that influenced parents' choice of a secondary school for their child. The latter topic will be reported separately at a later time.

In addition, *High School and Beyond* collected information on the type of elementary school attended (public, Catholic, or other private) in 1982. Unfortunately, we know nothing more about the schools than their type. Nonetheless, these new data are a unique source of information on the transition of students from elementary to secondary schools. From the point of view of elementary schools, *HS&B* represents a long-term follow-up on the effects of the type of elementary schools attended. The results of our analyses of the *HS&B* data that bear on elementary schools are reported at the end of this section.

Seventh and eighth grade curricula were quite similar across the schools we visited.

Like secondary school curricula, the elementary schools' curriculum emphasizes an academic core taught in a highly traditional manner. While we observed a wide variety of classes in both the seventh and eighth grades, we focused primarily on language arts and mathematics. Each of these is considered in what follows.

Strong emphasis was placed on skill building in basic areas of reading, language use, and mathematics. There were few examples of advanced courses, uses of technology, or innovative teaching techniques.

Language arts. Language arts teachers emphasized grammar—parts of speech, sentence structure, verb tenses—vocabulary, and composition. Their teaching methods involved drill work, sentence diagramming, short-answer questions in class, and regular homework. As one teacher noted, "The students have not gotten into literature this year. We have concentrated on grammar, sentence structure, and paragraphs. They have also spent considerable time on sentence diagramming." We rarely visited a language arts class without seeing students at the board diagramming sentences, taking short quizzes on vocabulary words, or reviewing sentences to identify parts of speech.

In one more advanced eighth grade English class, the students reviewed the mythological stories of Zeus, Poseidon, and Arachne. The teacher discussed the Greek notions of the prowess of the gods and goddesses and showed how literature used these themes. The homework assignment was particularly inventive: "Write a one-page original myth that digs into your myth repertoire to explain something in today's world that you don't understand." Classes of this sort, however, were quite unusual in the elementary schools we visited.

Mathematics. We generally observed eighth grade students working on percentages, decimals, multiplication and division of four-digit numbers, and graphing. In one school, we saw a great deal of consumer math: interest rates, profit margins, discounts, and sale pricing. In another class, the concept of ratios—and how to use proportions and cross products—was taught in didactic fashion to the class as a whole. In an effort to ensure that every student grasped the point, the instructor became somewhat repetitive at times.

In perhaps the best eighth grade class we visited, the teacher began with a warm-up drill, in which she held up a card with a column of numbers on it. She lined the class up in two teams. The first student in each line would add the numbers and then perform an operation given by the teacher,—e.g., "subtract 40 from the sum." As soon as one student had the correct answer, she would hold up another card and direct the next pair to sum the numbers and perform the operation. The students were very involved in this activity. After using this drill for ten minutes, she reviewed the previous night's homework and then taught a lesson on how to solve for a variable by using two operations. For example, the students solved equations such as $5y-23=14$ and $w/(-4)+3=6$. After working with the students in this way for about 20 minutes, she assigned several problems from the textbook for homework, which the students began during class. Student engagement remained very high throughout this pre-algebra class.

Based on our examination of student test scores and the general level of comprehension in the classes observed, we wonder whether the most talented students were being challenged sufficiently. We found very few instances where algebra was offered, although it is a fairly standard course for at least a portion of public school eighth graders. Further, several of the classes used textbooks that appeared to be aimed at the lower and middle sections of the class.

Our observations in this area highlight a more general problem in curriculum management for some Catholic elementary schools. Most of the mathematics classes we visited contained between 25 and 35 students. In the absence of teaching support such as classroom aides, individual instruction becomes very difficult. As a result, there is a natural tendency to attempt to move the whole class along at a relatively uniform pace.

This problem seems likely to be exacerbated by a movement to one class per grade level, which we observed in several of the schools we visited. When combined with an open admissions policy, at least for children within the parish, it creates classes at

each grade level that are quite diverse academically. This diversity can become so extreme as to tax the abilities of even the most proficient teacher. For example, one eighth grade that we visited had five students in the 120-130 I.Q. range and four in the range below 80. How to organize this class of 31 so that all are well served remains an issue.

Catholic elementary schools are quite independent of each other and of their secondary school counterparts. We encountered strikingly few examples of collaboration or even much communication across institutions. We found only a few instances of schools sharing facilities or students taking courses at other schools.

Compared to public school systems, there is considerably less coordination among Catholic elementary and secondary schools. At one site, we found an elementary and secondary school sharing a building, but even here contact between the schools was limited. In general, we were surprised by how little academic coordination existed across the eighth and ninth grades (i.e., the traditional boundary between elementary and secondary Catholic schools). This serves as a great divide for both schools and students. We encountered only one case of cross-registration where a few eighth grades students were taking an algebra course at a neighboring secondary school. Given the questions raised above about the ability of some Catholic elementary schools to provide adequate depth of curriculum for the more advanced eighth graders, the Catholic high schools, often literally next door, seem like an important opportunity missed.

Similarly, elementary school teachers report they have few opportunities for contact with their secondary school colleagues. They thought more discussion of curriculum matters across the eighth and ninth grades would be beneficial. Here too, we heard of only one such instance in which a secondary school sought to remedy some inadequacies in the mathematics background of the students it received. Many teachers and administrators felt more opportunities for dialogue would be valuable. Several suggested that the diocesan education office would be the logical agency to initiate such efforts.

We suspect that our findings here are quite general. Since we selected elementary schools that were feeder schools to the secondary school sample, we probably encountered more opportunities for institutional linkage than are typical. We have several cases within our sample where the elementary and secondary schools are staffed by the same religious order. These elementary schools normally send a significant number of students to the high school. Yet even here, program coordination was quite limited.

Catholic elementary schools are quite autonomous because the vast majority of these schools are operated by individual parishes that are themselves autonomous. While the schools and parishes we visited had

In general, governance structures for elementary schools varied considerably across the sites we visited. Many had school boards, some had finance committees for the school, and still others had parish council education committees with school responsibilities. The layers of responsibility for the school were confusing at times, not only to us, but also to the members of the committees. While many formal structures exist, what emerged in our interviewing was that the most important person in the governance of the Catholic elementary school remains the pastor of the parish—and this has not changed since the Third Plenary Council of Baltimore in 1884. Deference to the position and perspective of the pastor ranks as the single most prominent feature of elementary school governance.

a variety of committees such as perish councils and school boards, the pastor remained the central and controlling figure. Deference to his opinions characterizes decision making within Catholic elementary schools.

In most of the schools we visited, the pastor exercised control with caution and sensitivity. Yet this strong reliance on the support, energy, and vision of one person—the pastor—caused us some concern. Since pastors transfer positions fairly regularly, the planning and care for the school can fluctuate with each change. The pastors we interviewed supported strongly the elementary schools in their parishes. What will happen though, when such a pastor retires or leaves the parish, and the successor is perhaps not so knowledgeable and kindly disposed to the school? These governance concerns, and their effect on both elementary and secondary schools, are further elaborated in Section 8.

At some Catholic elementary schools, there are questions about the appropriate mission of the school. Should it continue to educate Catholics of the parish, or does it have a larger ecumenical purpose that extends to non-Catholics outside the parish? This tension plays out most poignantly in schools with high percentages of minorities, particularly blacks, who are predominantly non-Catholic.

Minority enrollment in Catholic elementary schools has grown steadily over the past decade. National data indicate that in 1982, blacks constituted 9.4 percent of Catholic elementary school enrollment, up from 5.1 percent in 1970. For Hispanics, enrollment has grown from 5.3 percent to 9.7 percent over the same period. In large urban areas the figures are substantially higher: in 1980, the minority enrollment in the New York City archdiocese was 53.2 percent, and in Chicago it was 46.4 percent.[1] Many schools have undergone a rapid transition within the last ten years, from all white to either racially integrated or all minority. Such rapid social change invariably produces some conflicts. How these conflicts play out for Hispanics and blacks in Catholic elementary schools is discussed now.

Hispanics. We visited three schools with large Hispanic enrollment. In general, pastors and principals in these schools were making strong efforts to integrate the Hispanic families—almost all of whom are Catholic—into the life of their parishes and schools. The pastors told us about special Spanish Masses and Hispanic cultural programs they organized for these parishioners. For example, at St. Martin's the pastor prepared himself for ministering to the Hispanics by studying Spanish and by participating in several workshops on Latin American culture and issues. He is also sponsoring a young Hispanic member of the parish in his studies for the priesthood.

There are some tensions in parishes such as St. Martin's over the increasing attention given to the new Hispanic members of the parish. According to the pastor, some of the older parishioners of European origin have expressed resentment about the time and energy he is devoting to the Hispanics. They formerly dominated the parish and still contribute a disproportionate amount to the financial support of both the parish and the school. Conflicts of this sort seem likely, given the nature of the transition that is under way.

1. See Thomas Vitullo-Martin, "How Federal Policies Discourage the Racial and Economic Integration of Private Schools," in Edward McGlynn Gaffney (ed.), *Private Schools and the Public Good*, Notre Dame, In.: University of Notre Dame Press, 1981; also the NCEA 1982-83 Statistical Report, *op. cit.*

Blacks. The situation with blacks is different. Only 44 percent of the blacks enrolled in Catholic elementary schools are Catholic.[2] In fact, urban Catholic elementary schools with over 50 percent non-Catholics are not uncommon. Further, Cibulka *et al.* have documented the primary reason blacks choose these schools is not religious but academic. The problem is particularly delicate in elementary schools because of their financing mechanisms. As discussed in more detail in Sections 7 and 8, the vast majority of elementary schools are supported by individual parishes, which continue to subsidize them at a substantial though declining rate. In some of the parish schools we visited, the older, more affluent white parishioners are effectively underwriting the costs of educating non-Catholics in their schools.

It is here that the question of mission becomes key. Traditionally, elementary schools have defined their primary mission as serving the Catholic students in their parish, perhaps extending it to Catholic students in nearby parishes that have no school of their own. As this pool of students has declined in several of the sample schools, the latter have reduced class size or cut back on the number of sections per grade. This policy effectively excludes some black families who might otherwise have supported the schools. The dominant force here is parish finances and priorities. In particular, the parish subsidy for the school can be either stabilized or reduced by reducing the number of students served. This policy also means that parish monies are contributed primarily to Catholic students from the parish.

Other Catholic elementary schools within our sample, however, choose to redefine their mission in broader, more ecumenical terms. In these parishes, the school is viewed as for all those parents and students who will support them. Parishes see this as an opportunity to extend the work of the parish beyond traditional limits. The school provides a particularly appealing vehicle for addressing community and social justice concerns. It can also advance more traditional ends, such as encouraging non-Catholic students and parents to become more familiar with the beliefs, sacraments, and traditions of Catholicism.

The financing of elementary schools that enroll significant numbers from outside of the parish remains a delicate issue. Many of the sample schools have different tuition rates for parishioners and non-parishioners, which gives at least the appearance if not the reality that the parish subsidy flows only to parishioners.[3] In other cases, the issue is just quietly ignored.

2. See Cibulka *et al.*, op cit.

3. It is unclear from our examination of elementary school finances whether these tuition differentials actually recover the full costs of educating non-parishioners. Given the ways in which parish and school finances have been intertwined in the past, determining a fair tuition is no simple matter.

A substantial proportion of the students enrolled in Catholic secondary schools previously attended public elementary schools. These generally come from families that are

Almost 20 percent of the students in Catholic secondary schools attended public elementary schools through the eighth grade. Another 20 percent had some mixture of public and Catholic elementary school.[4] The remaining 60 percent attended a Catholic school K through 8.

The average family income for students from public schools was considerably higher than for those who had attended Catholic schools K through 8: in 1980 dollars

4. The group with a mixed public and Catholic elementary school background is not considered further in this executive summary. The interested reader is referred to Section 6 of the *Technical Report* for more details.

more affluent and better educated than their Catholic elementary school counterparts. They are also more likely to select an academic program in a higher-tuition school. Their academic attitudes, behaviors, and the courses they take are consistent with their higher social class.

it was $28,173 vs. $24,783. Similar differences exist in terms of parental education. Further, students from Catholic elementary schools come from larger families and indicate a stronger degree of religious attitudes and practices. Almost 60 percent of the non-Catholics in secondary schools previously attended public schools K through 8.

Students from public elementary schools are more likely to attend higher-tuition religious order schools where there is less teacher turnover and more teachers have advanced degrees. They also tend to rate the quality of teaching and the overall quality of their Catholic secondary schools higher than do students from Catholic elementary schools, as would seem appropriate from the preceding discussion.

Students from Catholic elementary schools do slightly less homework (5.74 vs. 6.39 hours per week) and watch more television (2.96 vs. 2.63 hours per night). They are more likely to be enrolled in a vocational program (11.5 percent vs. 2.4 percent), and as a result take more business courses and fewer foreign language and mathematics courses.

These data suggest a general pattern of more affluent students from public elementary schools, often non-Catholic, selecting the more prestigious academic Catholic secondary schools. These results are consistent with the interpretation, offered in Section 5, that families of higher social class are more likely to select Catholic schools on academic grounds, whereas those of lower social class are more likely to attend to religious considerations.

Catholic secondary school students from Catholic elementary schools display lower levels of academic achievement, educational aspirations, and affective development than public elementary school students who choose to attend Catholic secondary schools. They are also more likely to indicate a positive attitude toward community and family and to support a traditional role for women. When we adjust for the differences in family background and the characteristics of the secondary school attended, however, our comparison of public

Students from public elementary schools differ from their Catholic school counterparts in several important ways: social class, family structure, characteristics of the secondary schools attended, and academic activities and programs selected. It is important to adjust for these differences before attempting to assess the effects of elementary school experience on outcomes during the secondary school years. We used a statistical procedure known as regression analysis for this purpose.

The results of these analyses are presented in Figure 6.1 for academic achievement and Figure 6.2 for college orientation, social and affective development. The columns in these figures represent the average difference between students who attended Catholic and public elementary school. A positive value indicates that students who previously attended Catholic elementary schools are outscoring their classmates who previously attended public elementary schools. A negative value indicates exactly the opposite. Results are displayed both before and after statistical adjustments. The former provides useful descriptive information about the overall differences between students from public and Catholic elementary schools. The latter provides a basis for estimating the effects of attending a Catholic elementary school. The results are presented in standard deviation units in order to compensate for the different scales employed here. In this way, it is possible to compare the relative magnitude of the effects across the various measures. Effects smaller than .10 of a standard deviation are generally not statistically significant nor educationally meaningful in these data.

Academic achievement. Our analysis indicates that the emphasis on vocabulary drill and various aspects of English grammar observed in the Catholic elementary school curriculum has beneficial effects. After statistical adjustment, students from Catholic elementary schools significantly outperform their public school counterparts in vocabulary, reading, writing, as well as in civics. Unfortunately, as our field work

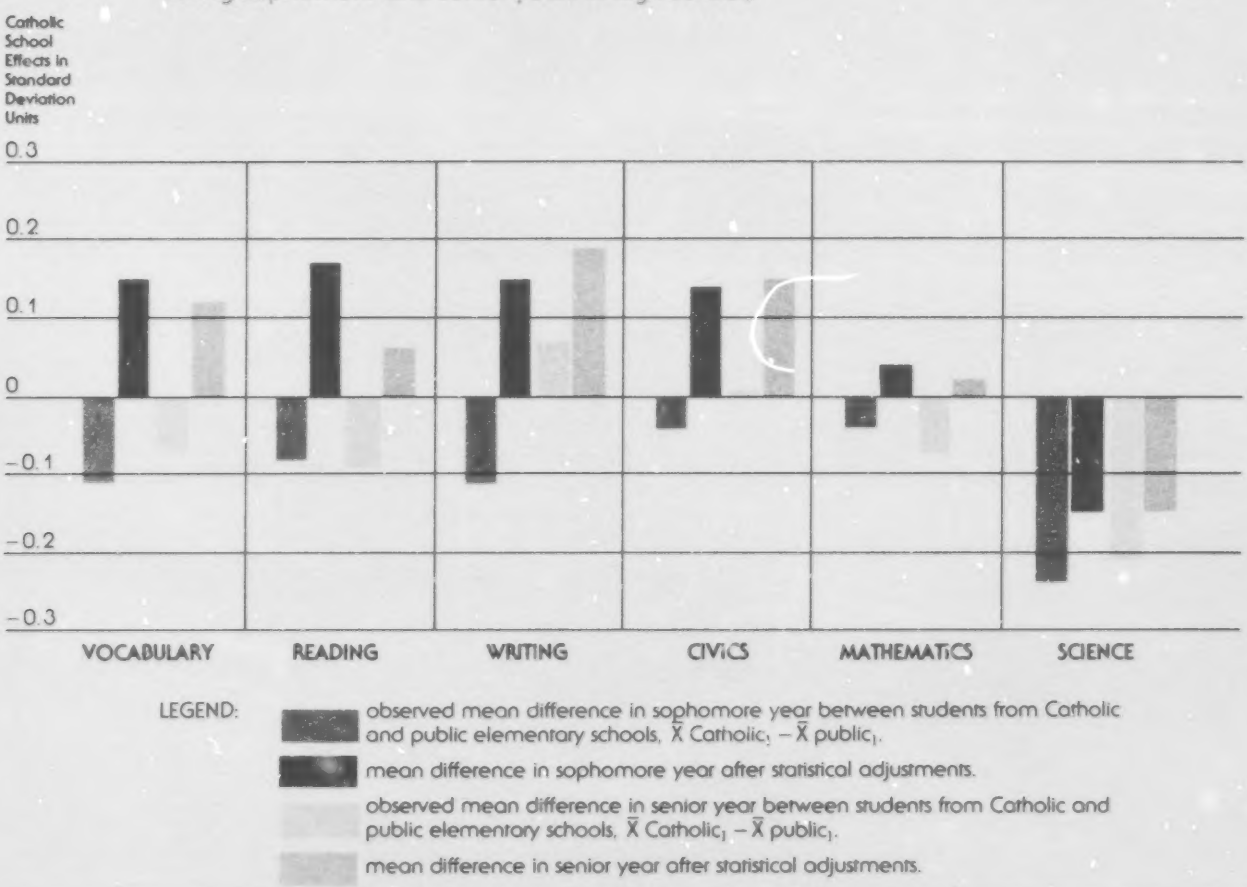
and Catholic elementary school students yields a very different picture. Catholic elementary school students significantly outscore their public school counterparts in vocabulary, reading, writing, and civics. There are no differences in mathematics, and Catholic elementary school students perform significantly worse in

did not focus on the last area, civics, we have no basis for explaining these results.

By contrast, there are no significant differences between students from Catholic and public elementary schools in the area of mathematics. Our observations about curriculum limitations may account for these findings. Even more important, the students from Catholic elementary schools performed significantly less well in science. This result provides further support for the finding reported in Section 5 that Catholic school offerings are not particularly strong in this area. Science curricula require specialized staff and resources such as laboratories and instructional aids. As mentioned previously, small school size combines with limited financial resources to take a toll in this area.

College orientation. Primarily by virtue of their higher social class, students from public elementary schools have a stronger college orientation than students from Catholic elementary schools. However, adjusting for background and school differences between the two groups causes this pattern to break down. Students from public elementary schools remain more likely to plan to attend college, but Catholic elementary school students have a slightly higher assessment of their ability to complete college. The latter, however, is not statistically significant.

FIGURE 6.1. The Effects of Attending a Catholic Elementary School on Academic Achievement (assessed during sophomore and senior years in high school)



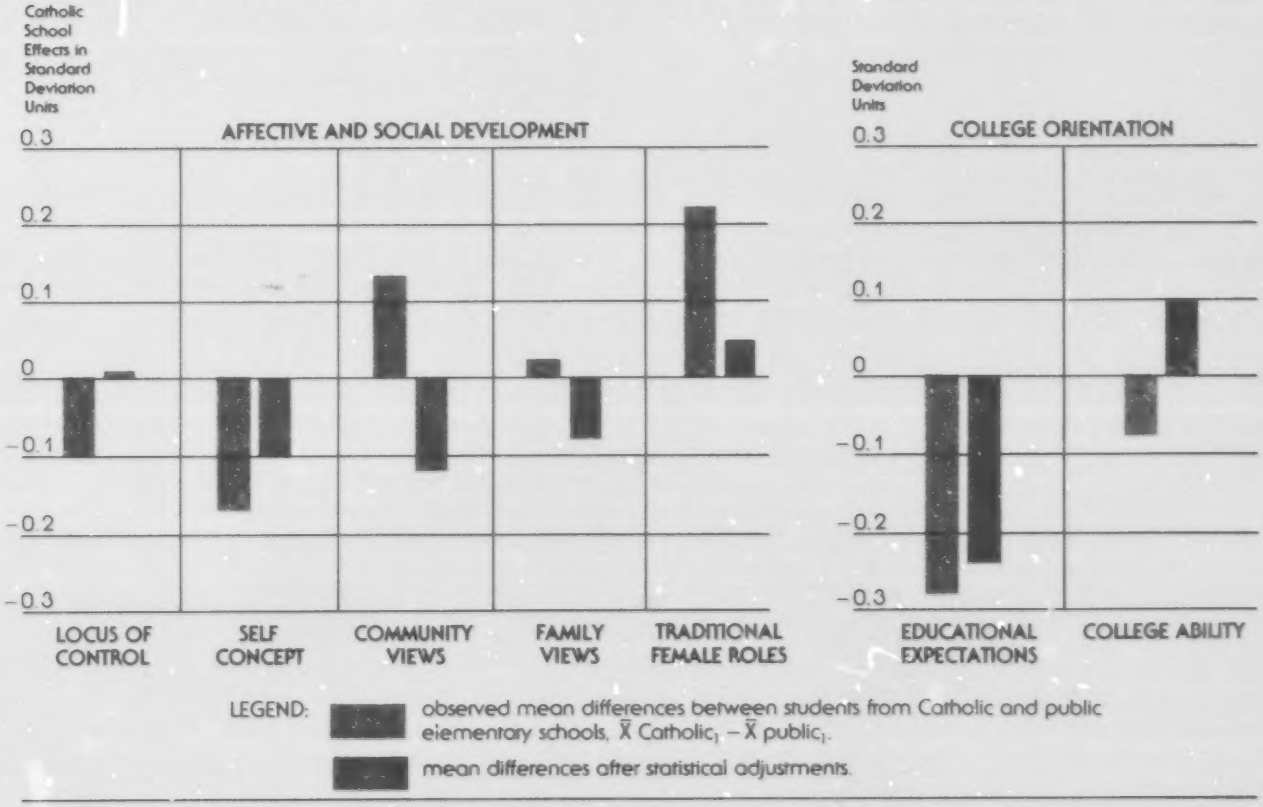
science. The initial differences in educational aspirations and social and affective development are all attenuated, with few statistically significant differences remaining.

Affective outcomes development. The observed differences in locus of control between students from public and Catholic elementary schools are insignificant both before and after adjustment. While students from public schools have a significantly higher self-concept, after statistical adjustment this too attenuates to non-significance.

Social outcomes development. In general, before statistical adjustment, students from Catholic elementary schools are more likely to be community and family oriented, and to express traditional views of the role of women. After statistical adjustment, however, students from public schools are slightly more likely to be community and family oriented. Further, the difference between the groups in their view of the role of women also becomes insignificant.

In sum, after adjusting for the differences in family background and secondary school factors, we find significant differences in school academic achievement between students who attended Catholic and public elementary schools. We conclude that Catholic elementary schools are particularly effective in the areas of language arts and civics, and particularly ineffective in science. There are no apparent effects of Catholic elementary schools in other areas. The adjusted differences in college orientation and affective and social development are small and generally insignificant, and follow no consistent pattern.

FIGURE 6.2: The Effects of Attending a Catholic Elementary School on College Orientation, Affective and Social Development (assessed during senior year in high school)



Section 7

83 The Finance of Catholic Schools

Section 8

92 The Governance of Catholic Schools

THE FINANCE OF CATHOLIC SCHOOLS

The first round of field work showed clearly that there were serious problems in the area of Catholic school finance. Although the positive academic achievements of Catholic schools and their stabilized enrollments have received considerable public recognition, much less attention is focused on school finance. Along with governance issues, which are taken up in the next section, finance constitutes one of the most pressing problems facing Catholic schools. If the schools are to survive in their present form and maintain their capacity, they must appropriately address these issues.

The growing financial pressure on Catholic elementary and secondary schools is due to four factors:
- *declining subsidies from the contributed services of religious personnel,*
- *increasing physical plant costs due to a long history of deferred maintenance,*
- *the need for substantial improvement in the very low faculty salaries, and*
- *the likely need to increase expenditures in response to a nationwide concern about improving the quality of schools.*

The cumulative impact of these pressures is enormous. A relatively conservative estimate

Religious order subsidies. Historically, religious orders have heavily subsidized Catholic schools by contributing services at salaries much less than market value. Over the past 15 years, this subsidy declined nationally at a rate of about $11 million per year. In 1967, the subsidy offset 31 percent of Catholic school operating costs. By 1982, it declined to 9 percent, and it seems likely that this subsidy will virtually disappear by 1995.

The main cause of diminishing subsidies is the declining numbers of religious personnel serving in Catholic schools. In 1967, 58 percent of the teachers in Catholic elementary and secondary schools were drawn from religious orders. By 1982, this figure had dropped to 24 percent (see Figure 7.1.). If this rate of decline continues, we can expect less than 10 percent religious faculty in Catholic schools by 1990 and less than 2 percent in 1995.[1]

In fact, our review of social and demographic data from women's and men's religious orders in the United States supports these projections.[2] Surveys of sisters in 1966 and 1980 indicate that the number of new entrants to religious life also has declined substantially over this period. New vocations in 1980 were only 11 percent of the 1967 figures. Perhaps most significant, an increasingly larger proportion of

1. These data were taken from *A Statistical Report on Catholic Elementary and Secondary Schools for the Years 1967-68 to 1969-70; United States Catholic Schools, 1971-72; United States Catholic Schools, 1972-73; United States Catholic Schools, 1973-74; Basic Financial Data on Catholic Elementary Schools, 1978; Catholic High Schools and Their Finances, 1978; Catholic Elementary Schools and Their Finances, 1979; Catholic High Schools and Their Finances, 1979; Catholic Elementary Schools and Their Finances, 1980; Catholic High Schools and Their Finances, 1980; United States Catholic Elementary and Secondary Schools, 1981-82; United States Catholic Elementary and Secondary Schools, 1982-83.*

2. *A Survey of the Retirement Concerns of Religious Institutes in the United States*, Washington, DC: United States Catholic Conference, 1982. *Conference of Major Superiors of Women Annual Proceedings*, Washington, DC: Conference of Major Superiors of Women, 1967, 1968. Marie Augusta Neal, *The Sisters' Survey, 1980: A Report, Probe*, May/June, 1981, X, 1-7.

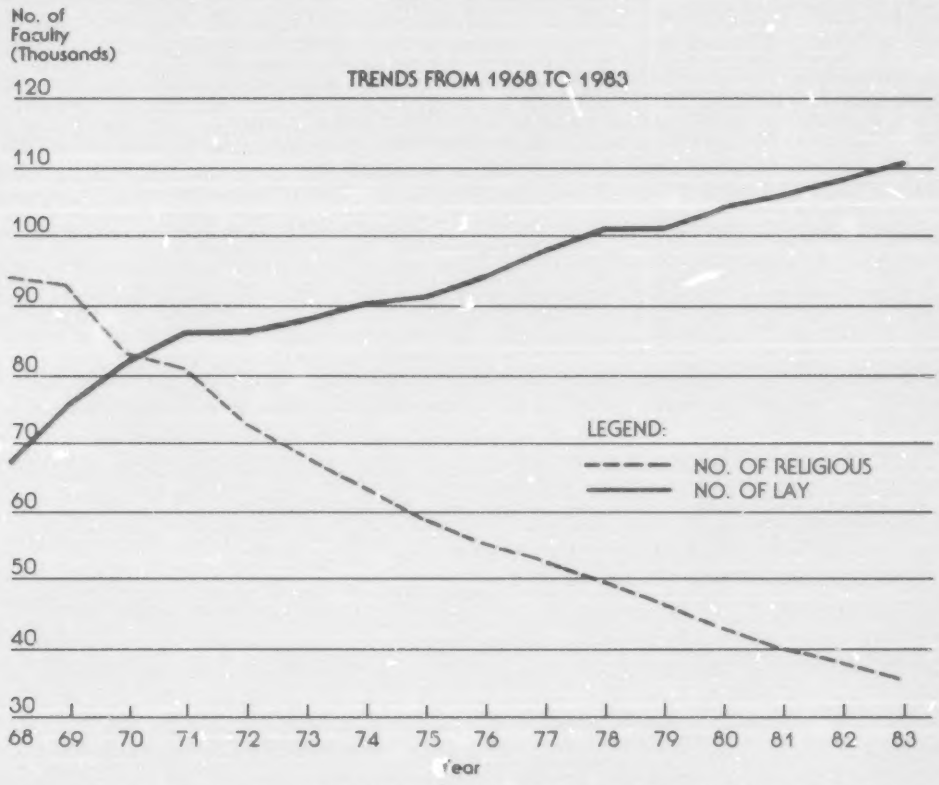
suggests that an additional $2 billion per year will be needed. This translates into an immediate cost increase of $670 per student currently enrolled in Catholic schools.

religious community members are either retired or infirm. The median age of religious personnel rose from 53.4 years in 1976 to 56.8 years in 1981.

Further, the number of ministerial options for active religious personnel has increased significantly in the past few years. They include social work, peace and justice education, parish work, prison ministry, and work with migrant families. Financial pressures create incentives for some religious congregations to shift their ministerial activity away from education to better-paying work. Sisters in hospitals, for example, are paid wages that are double or triple those typically paid teachers. Some sisters report they feel obligated to seek better-paying jobs so they might provide more money for the retirement and health care needs of their communities.

Almost half of the religious congregations realize their retirement financing will reach crisis proportions by 1991.[3] Female communities see the problem as more

FIGURE 7.1:
Number of Religious and Lay Faculty



Sources: These data were taken from A Statistical Report on Catholic Elementary and Secondary Schools for the Years 1967-68 to 1969-70; United States Catholic Schools, 1971-72; United States Catholic Schools, 1972-73; United States Catholic Schools, 1973-74; Basic Financial Data on Catholic Elementary Schools, 1978; Catholic High Schools and Their Finances, 1978; Catholic Elementary Schools and Their Finances, 1979; Catholic High Schools and Their Finances, 1979; Catholic Elementary Schools and Their Finances, 1980; Catholic High Schools and Their Finances, 1980; United States Catholic Elementary and Secondary Schools, 1981-82; United States Catholic Elementary and Secondary Schools, 1982-83.

3. *A Survey of the Retirement Concerns of Religious Institutes in the United States*, op. cit. p. 2.

pressing largely because of the increasing ratio of retired and infirm to active members. The income-producing base is shrinking at the same time as retirement costs are escalating. This information is important because the fiscal health and stability of the religious congregations that sponsor, administer, and staff Catholic schools is closely related to the fiscal health of the schools.

We conclude that schools can no longer look to their sponsoring religious orders for financial solutions, since many of these have similar financial problems. The fiscal position for most religious orders is heading toward a shortfall. We see two separate but related fiscal time bombs ticking away—one within the Catholic schools and the second within many religious congregations that have traditionally staffed and supported these schools.

Deferred maintenance. Standard accounting handbooks suggest that at least two percent of the total replacement costs of buildings and equipment be set aside each year for major building maintenance. These funds for renewals and replacement are analogous to building depreciation allowances. A figure of two percent per year is equivalent to estimating a fifty-year lifetime for a facility.

Many Catholic schools, however, have either grossly underfunded deferred maintenance accounts or have none at all. Further, it appears that this has been the practice for some time. For inner-city schools especially, the deteriorating condition and high cost of maintaining physical facilities pose a serious threat to the schools' ability to survive. Constructed in an era when energy and labor were less costly and vandalism less frequent, such schools are funded inadequately to meet current physical plant needs.

Our sample schools varied widely in the amounts designated for plant repair and renewal. One school spent $76 per student on building maintenance and set aside $1.70 per student for the replacements and renewals fund. At the opposite end of the spectrum, another school spent $199 per student on building maintenance in addition to setting aside $121 per student for the plant fund. Unfortunately, most of the schools were more like the former than the latter.

Although national data on major maintenance funds for Catholic schools are fragmentary, existing information indicates that the monies available here are quite small relative to the replacement costs of school facilities. In addition, since many of the current physical plants of Catholic schools were erected in the 1950s or earlier, major maintenance work and renovations seem likely. We approximate the current replacement value of the 9500 Catholic schools in America at about $20 billion. Calculating deferred maintenance at two percent per year results in a total of $400 million, which is far in excess of the estimated $34 million currently available. Further, we suspect this two percent figure may be somewhat conservative, since many Catholic school buildings have not been maintained adequately for some time.

Faculty salaries. Faculty salaries varied widely across the schools in our sample. The largest discrepancies occurred as teachers neared and reached the top steps of the scales. The variation at this level approached 100 percent, as seen in the maximum $12,700 at St. Frances' High School compared with $24,600 at St. Cornelius' High School.

Catholic school salaries have always been considerably lower than those in public schools.[4] Elementary school salaries have averaged about 60 percent of those in the public sector. At the secondary level, the figure is about 75 percent.

4. These data were taken from the sources listed in note 1 and from W. Vance Grant and Leo Eiden, *Digest of Educational Statistics, 1981*, Washington, DC: National Center for Educational Statistics, 1982.

All of the sample schools acknowledged that they felt considerable pressure to increase faculty salaries faster than at inflation. Several schools set as a goal teacher salary schedules based at 85 to 90 percent of local public school scales. Only one of the sample schools, however, was within this range.

If Catholic schools' salaries in 1980-81 had been set at 90 percent of parity, the additional system cost for the 71,800 lay elementary school teachers would have been $459 million. For the 34,500 lay secondary teachers, another $134 million would have been required. Because of annual salary increases and the continually increasing number of lay faculty members, the system totals in 1983-84 would be substantially higher. To reach 90 percent of parity today would require about $575 million at the elementary level and $170 million at the secondary level. It is clear that addressing the salary needs of lay faculty will place substantial financial demands on Catholic schools.

Current reforms in the public sector. The spate of commission reports and reform proposals for secondary education have serious financial implications for public schools. This is particularly true in the areas of higher salaries and career ladders in the teaching profession, lengthening of the school year, and greater use of educational technology such as microcomputers and interactive videodiscs. It is estimated an additional $20 to $30 billion would be needed annually to implement some modest set of changes in public schools.[5] Several states have enacted already school improvement plans and substantially increased state aid to public education as a means for realizing these plans. Many others are likely to follow. The actions taken to date suggest that the estimate offered above is quite reasonable.

FIGURE 7.2.
Summary of Additional Revenues Needed by Catholic Schools (millions of dollars)

SOURCE	(MILLIONS OF DOLLARS) YEAR 1984	1989	1994
Increase in Salary Expenses Due to Declining Numbers of Religious Staff	$20	$116	$309
Reserve for Deferred Maintenance Costs	$400	$535	$716
Increase in Teacher Salaries to 90% of Parity with Public School Salary Scales	$744	$1,169	$1,670
Resources to Implement School Improvement Proposals at 50% of Public School Level	$1,000	$1,338	$1,790
TOTALS	$2,164	$3,158	$4,485

Sources: These data were taken from A Statistical Report on Catholic Elementary and Secondary Schools for the Years 1967-68 to 1969-70; United States Catholic Schools, 1971-72; United States Catholic Schools, 1972-73; United States Catholic Schools, 1973-74; Basic Financial Data on Catholic Elementary Schools, 1978; Catholic High Schools and Their Finances, 1978; Catholic Elementary Schools and Their Finances, 1979; Catholic High Schools and Their Finances, 1979; Catholic Elementary Schools and Their Finances, 1980; Catholic High Schools and Their Finances, 1980; United States Catholic Elementary and Secondary Schools, 1981-82; United States Catholic Elementary and Secondary Schools, 1982-83.

5. Harold Howe, "Education Moves to Center Stage: An Overview of Recent Studies," *Phi Delta Kappan*, November, 1983, 65, 167-172.

For Catholic schools to retain dedicated faculty, keep salaries from falling even further behind those of public schools, and maintain academically attractive programs will require additional financial resources. A level of effort comparable to the public sector estimate mentioned above might require an additional $2 billion annually for Catholic schools. Even a figure at half this level, however, seems improbable given the current mechanisms for financing Catholic schools. Figure 7.2 summarizes our estimates of the additional revenues that will be needed.

Catholic schools have become more tuition-dependent in the past 15 years. Their financial subsidies from dioceses, religious orders, and parishes are declining. Although there is great interest and activity in the areas of annual fund raising and development, the percentage of revenues generated here remains small. Thus, it seems likely that Catholic schools will become even more tuition-dependent in the near future, and that tuition costs will continue to escalate rapidly.

The revenue sources for elementary and secondary schools vary considerably. The vast majority of elementary schools are operated by parishes, and historically, have been heavily subsidized through parish contributions. In addition, parish schools received a subsidy in the form of reduced salaries from the religious order that staffed the school. As indicated above, however, religious order subsidies have been declining for some time. Even if an elementary school has a significant number of religious personnel, it may no longer receive any financial subsidy from their presence.

Thus, the major factor influencing the financial health of elementary schools is the financial health of the sponsoring parish. Since many parishes, particularly those in urban areas, are pressed financially, they are unable to maintain previous support levels. As a result, over the past 15 years, parish subsidies declined nationally, and tuition rose in order to compensate for these losses.

At the secondary level, only 22 percent of the schools are operated by parishes and are thus eligible for a direct parish subsidy. The vast majority of the schools are sponsored either by a religious order, 36 percent, or a diocese, 42 percent. While in the past these schools might have received a significant subsidy from their sponsors, this is much less prevalent today. (For more details on the structure of Catholic school governance see Section 8.)

Diocesan resources, and consequently their subsidies to schools, show trends similar to those for the religious orders. Within the past decade, dioceses have found their costs increasing rapidly in the face of relatively constant revenues. While schools constitute an important diocesan activity, there is increasing competition for scarce resources from other activities such as Catholic charities, adult education, university campus ministry, and research and planning. Dioceses that have supported schools in the past are no longer able to do so. In the past decade, dioceses have therefore generally divested themselves of fiscal responsibility for operating expenses at Catholic schools. Although in some dioceses a few inner-city schools still receive a subsidy, most schools do not.

Development and annual fund raising is another revenue source for Catholic schools. While some secondary schools, particularly those sponsored by religious communities, have had active development programs for several years, this is a new enterprise for most secondary schools and virtually all elementary schools. Catholic school finance specialists have argued that Catholic schools should generate, through development activities, between 10 and 20 percent of their annual revenues.[6] National data show that development and fund-raising activities have increased somewhat. In 1969, these activities produced 5.7 percent of all elementary school revenues

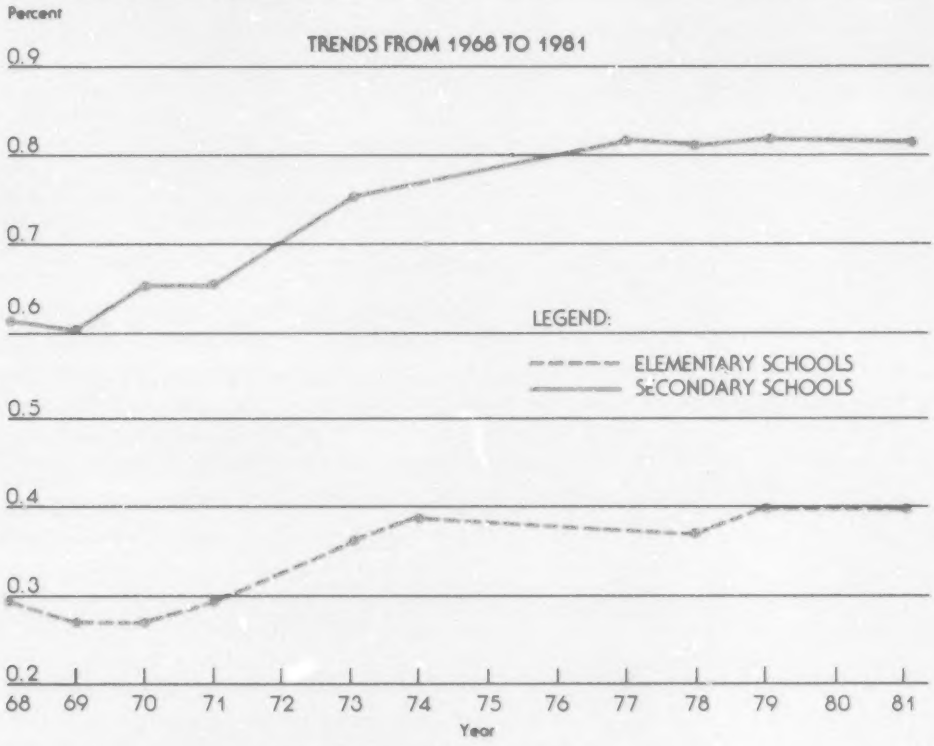
6. Michael O'Neill, "A Pragmatic Approach to the Teaching Ministry," *Momentum*, October, 1977, *VIII*, 43-49; and Richard J. Burke, "Financing Strategies for the 1980s," *Catholic School Management Newsletter*, May, 1979, *1*, 1-4.

and 5.3 percent at the secondary level. These figures rose to 7.2 and 6.6 percent respectively by 1980. Although a few Catholic schools currently realize development income in excess of 10 percent of their total revenue and others can see this as a realistic goal, most are unlikely to attain this level in the near future.

To compensate for diminishing subsidies and the relatively slow growth in development and fund raising, Catholic schools have looked to tuition to generate the necessary operating revenues. As a result, tuitions have increased faster than at inflation. From 1967 to 1981, elementary school tuitions increased nationally 516 percent and secondary tuitions by 378 percent. In comparison, the consumer price index rose 272 percent in the same period.

Further, Catholic schools have become increasingly tuition-dependent. Figure 7.3 provides trend data on the percentage of the per-pupil cost offset by tuition. This too has been rising. Elementary school tuitions increased from 27 to 40 percent of the total. At the secondary level, tuition offset 60 percent of pupil expenditures in 1968. This figure rose to 82 percent in 1981.

FIGURE 7.3
Tuition as Percent of Per-Pupil Costs



NOTE: Points represent the years for which data are available.

Sources: These data were taken from A Statistical Report on Catholic Elementary and Secondary Schools for the Years 1967-68 to 1969-70; United States Catholic Schools, 1971-72; United States Catholic Schools, 1972-73; United States Catholic Schools, 1973-74; Basic Financial Data on Catholic Elementary Schools, 1978; Catholic High Schools and Their Finances, 1978; Catholic Elementary Schools and Their Finances, 1979; Catholic High Schools and Their Finances, 1979; Catholic Elementary Schools and Their Finances, 1980; Catholic High Schools and Their Finances, 1980; United States Catholic Elementary and Secondary Schools, 1981-82; United States Catholic Elementary and Secondary Schools, 1982-83.

In sum, Catholic schools currently face a very reduced set of options for raising the revenues needed to respond to the fiscal pressures outlined in the previous section. Unless a major new source is found, it seems likely that schools will become even more tuition-dependent, and that increases here will be rapid. To meet its current fiscal needs exclusively through increases in tuition would require the typical elementary school to double its charge immediately.[7] We wonder how many institutions would survive such a measure. And for those that did, the clientele served would surely change.

7. The total cost of these improvements spread over the students attending Catholic schools would amount to $670 per student, which is slightly higher than the $653 per-pupil costs in elementary schools for 1980-81.

The financial condition of Catholic schools varies by location and governance type. Our analyses indicate that some schools, particularly those serving suburban populations, could charge higher tuitions and maintain their enrollments. Others, however, particularly inner-city schools serving substantial numbers of low-income families, are already financially pressed. This is where the greatest financial needs exist and also where rapidly rising tuitions are likely to have their most drastic effects.

While the national financial data on Catholic schools are sobering, inferences about individual schools should be drawn with great care. Catholic schools are quite diverse. Each school is administered individually. As a group, they are more like a loose federation of private schools than a highly centralized system. As a result, these financial pressures are likely to be felt unevenly across schools. We sketch below how these forces affect three cases we believe capture much of the diversity among Catholic schools.

Established religious order schools. Many of the most fiscally solvent Catholic schools are staffed and governed by religious orders. St. Edward's in Louisville is an example of this type. Founded in the mid-nineteenth century by a religious congregation of brothers, St. Edward's enjoys a strong reputation for academic excellence and civic leadership. Located for many years in downtown Louisville, the school moved to a more spacious campus near the edge of the city twenty years ago. Its student body is almost exclusively white and Catholic. The median family income in 1982 was $35,000. Although the school does feature a remedial "school within a school" for approximately 60 students per grade each year, its curriculum is almost entirely college-preparatory, with a wide selection of courses including 12 advanced placement offerings and 19 advanced college credit courses.

For over a decade, the school has operated at capacity enrollment. Applications for admission exceed the openings. The school's tuition of $1450 is the highest in Louisville and above the national median. Classes are large, sometimes averaging over 35 students per section. The relatively high tuition and the large class sizes make it possible for the school to peg its salary schedule at 100 percent parity with the local public schools. As result, the school is able to attract and maintain a dedicated and well qualified faculty. Faculty turnover has been low, averaging less than five percent per year over the last five years.

St. Edward's benefits from strong financial guidance provided by its Board of Directors. It currently maintains over $300,000 in a fund for renewals and replacement. Recently, the school initiated a four-phase $8 million capital campaign to add specialized classrooms, computer hardware and software, a performing arts center, and to provide some endowment for scholarships and faculty salaries. The Board has played a key role in this development campaign.

Given the general fiscal health of the school, there is no evident need for rapid increases in tuition. While tuition is high by Louisville standards, so is the median family income. Thus the school's ability to raise additional funds through tuition has not been exhausted, and constitutes a future source of revenue. Schools such as St. Edward's are well positioned to survive the financial strains of the decade ahead.

Diocesan suburban schools. St. Richard's, established by the Archdiocese of Boston in 1959, was initially staffed by a single religious congregation of sisters. It now includes sisters and brothers from several religious orders. Although the school's enrollment fluctuated widely in the past 15 years, it is currently at 900, capacity for the school. The curriculum is college-preparatory with strong academic programs in the core disciplines. Parents and students laud the family spirit of the school and the individual attention that characterizes the faculty's interactions with students.

There are some deficiencies, however. St. Richard's has no music program. Likewise, there are no computer facilities, despite the school's location near a major high-tech area. Teacher salaries are relatively low, particularly for a suburban school, and necessary plant renovations are constrained by limited resources.

High School and Beyond data indicate that tuition in suburban schools such as St. Richard's constitutes about 8.2 percent of families' discretionary income. In urban schools, the comparable figure is 9.7 percent.[8] This suggests schools that draw their students from suburban areas have the potential of raising their tuition by as much as 20 to 25 percent. This may be particularly true if tuition increases were combined with a financial aid program and discounts for families enrolling more than one child. Such a school could realize, then, some increased revenues without limiting the social-class range of its student body.

On balance, while these additional tuition revenues would be helpful, it is unlikely St. Richard's will be able to solve all or even most of its resource needs in this manner. The guidance and strong financial assistance of a committed Board of Directors also seems essential. Although St. Richard's has an advisory board, all legal, policy, and major financial decisions are made by the diocese. There is no tradition of strong local board involvement at the school.

Unfortunately, there is no simple solution. To move a school like St. Richard's to a position such as St. Edward's takes much time and effort. There is a broad base of potential support that could be tapped for this school. The community is relatively affluent, and some of the school's earlier graduates have become quite successful. Unless St. Richard's reaches out to these groups, however, it is unlikely that the school can adequately address its resource needs.

Inner-city schools. A look at St. Peter's High School in San Antonio is particularly revealing. As families have moved from the city to suburban neighborhoods, they have been replaced by black and Hispanic poor. In the past decade, white enrollment at St. Peter's has declined from 60 to 37 percent, whereas blacks have increased from 10 to 26 percent and Hispanics from 30 to 37 percent. The school now faces its mission with severely constrained revenues. The median family income at St. Peter's, often based on two working adults, is slightly less than $20,000. The rapid demographic and financial changes that have taken place make this school particularly vulnerable to closing.

St. Peter's needs additional resources for upgrading its salary scale so as to attract and keep more qualified teachers. Renovation of the physical plant is a priority: roofing, window frames, and interior refinishing work have been deferred for several years and require immediate attention. The replacement of a wooden annex housing four classrooms is likewise an urgent need. Further, St. Peter's wants to expand its curriculum to include business, computer, and vocational courses that

8. We define family discretionary income as the total family income less the income allowance under federal poverty standards. Since the latter is based on family size, the calculation of discretionary income is effectively adjusted for family size.

require significant capital outlays for equipment. In short, the school needs large increases in revenues to meet its basic operational needs.

The school faces other critical problems. In 1982, St. Peter's lost the community of sisters that administered and staffed the school. The damage extended beyond the contributed services of the sisters. With their departure, the school also lost the vast majority of its experienced teachers. As the number of religious staff dwindled toward zero, faculty turnover escalated to about 30 percent a year. The school was thrown into an identity crisis of sorts. As the school board president remarked: "In the minds of the people who support us, religious faculty are what makes a school Catholic." It all happened very quickly; the religious order made little effort to facilitate a smooth and orderly transition.

In general, the fiscal picture for many inner-city schools such as St. Peter's seems ominous. The schools have high marginal costs relative to suburban and rural schools. These costs contributed significantly to the substantial higher rate of school closings in urban areas in the late 1960s and early 1970s.[9] Even though the demand for such schools is currently strong, they face a situation in which tuition increases cannot generate anywhere near the additional resources needed. Inner-city Catholic schools have greater financial needs than their suburban counterparts such as St. Richard's, but the families they serve have considerably smaller incomes. Although many former students have become financially successful, few of them identify with the school and its new mission.

Our analyses support the conclusion, already noted by others,[10] that many inner-city schools serving large numbers of minority children are likely to close. Unlike the established religious order schools and suburban diocesan schools, which appear to have some promising options, inner-city schools seem highly constrained. Rapid increases in tuition are not feasible. The local parishes are also at the edge of fiscal insolvency and are unable to help. The religious orders and dioceses that subsidized these schools heavily in the past are unable to continue this practice. The situation at schools such as St. Peter's is cause for alarm.

In conclusion, there are formidable financial pressures that will face Catholic schools in the next few years. These pressures will not affect all schools uniformly. With the decline of religious order, diocesan, and parish subsidies, development and fund raising programs along with tuition increases appear as the only ways to raise revenues. Whereas established religious order and suburban diocesan schools can use these avenues to obtain additional resources, inner-city schools serving predominantly minority populations are not so fortunate. The economics of increasing expenditures and diminishing opportunities for increasing revenues leave these schools in a rapidly tightening vise.

9. Thomas Vitullo-Martin, *Catholic Inner-City Schools: The Future*, Washington, DC: United States Catholic Conference, 1979, Chapters 1 and 2.

10. James Cibulka, Timothy O'Brien, and Donald Zewe, *Inner City Private Elementary Schools: A Study*, Milwaukee: Marquette University Press, 1982, pp. 201-208.

THE GOVERNANCE OF CATHOLIC SCHOOLS

Three facts complicate any discussion of the governance of Catholic schools. First, there are three different categories of Catholic schools: diocesan, parish, and religious order (sometimes referred to as private). The governance differences among the three types of schools are most distinct in the fiscal and legal areas. In diocesan schools these responsibilities reside with the diocese and ultimately the bishop. In parish schools they are ultimately vested in the pastor as "the chief executive officer" of the parish. In private schools, they may either fall to the religious order that sponsors the school, or, as is increasingly more common, they may be vested in a board of directors who are appointed by the religious order.

Second, there are overlapping and occasionally conflicting jurisdictions. Under Canon Law, the universal rules that govern the organization of the institutional Church, the bishop maintains authority over Catholic schools within his diocese. While this authority applies most forcefully in the area of Catholic teachings, the bishop s influence can extend substantially beyond this domain. The canonical situation of the various religious orders adds another complication to the governance picture. Some of these, known as diocesan congregations, fall under the direct supervision of the bishop, while some religious orders, such as the Jesuits, do not. Further, within the past 15 years, several constitutional elements such as diocesan pastoral councils, parish councils, and local school boards have been grafted onto the system. In addition, during this same period, diocesan boards of education became more involved in setting policies affecting Catholic schools.

Third, the interpretation and implementation of the governance system vary substantially across dioceses. Some bishops might choose to exert a great deal of control over the schools. In the dioceses we visited, however, most of this authority is delegated to other individuals, such as the superintendent of schools, and to advisory groups, such as the diocesan board of education.

Diocesan schools like St. Richard's are governed by a diocesan board. These boards consist of both religious and lay members who are appointed by the bishop. The board is charged with recommending policies to the bishop for all diocesan schools in a variety of areas—e.g., faculty salaries, benefits, school calendars, tenure policies, and discipline codes. The appointment of principals in diocesan schools is also under the authority of the diocesan board.

In addition, a school might have its own board. At St. Richard's, for example, there is a principal's advisory board. It meets regularly with the principal to discuss the school budget and academic programs, and to provide support for school fund-raising projects. While the diocese maintains fiscal and legal control of St. Richard's, it does not subsidize the school. As long as the school manages to balance its budget, decisions about routine financial matters rest with the principal and his advisory board. Should the fiscal situation become unstable, the diocese would be liable and could conceivably move to close the school.

In private Catholic high schools like St. Madeline's and St. Edward's, the key governing body is the school's board of directors. These boards are typically composed of religious and lay members and have powers similar to those of the boards of member schools of the National Association of Independent Schools (NAIS). They have, for example, authority to select the principal, set tuitions, fix faculty salaries, establish other financial policies, and oversee the academic, religious, and other programs of the school. Most diocesan policies, such as faculty salary schedules, would not apply at a private school such as St. Edward's. The contact between the school and the diocese would generally be cordial but limited.

Finally, as we indicated in the section on elementary schools, most governance matters in parish schools are resolved in the interactions among the pastor, the principal, the parish council, and the school board, if one exists. An organizational chart here can be somewhat misleading, as much of the decision making is quite informal, with a great deal of deference being given to the pastor's opinion. Like diocesan schools, however, parish schools must operate within the policies formulated by the diocesan board.

Figures 8.1, 8.2, and 8.3 provide simplified organizational charts for the governance of parish, diocesan, and private schools, respectively. They are intended to

FIGURE 8.1
A Simplified Organizational View of the Governance Structure for a Parish School

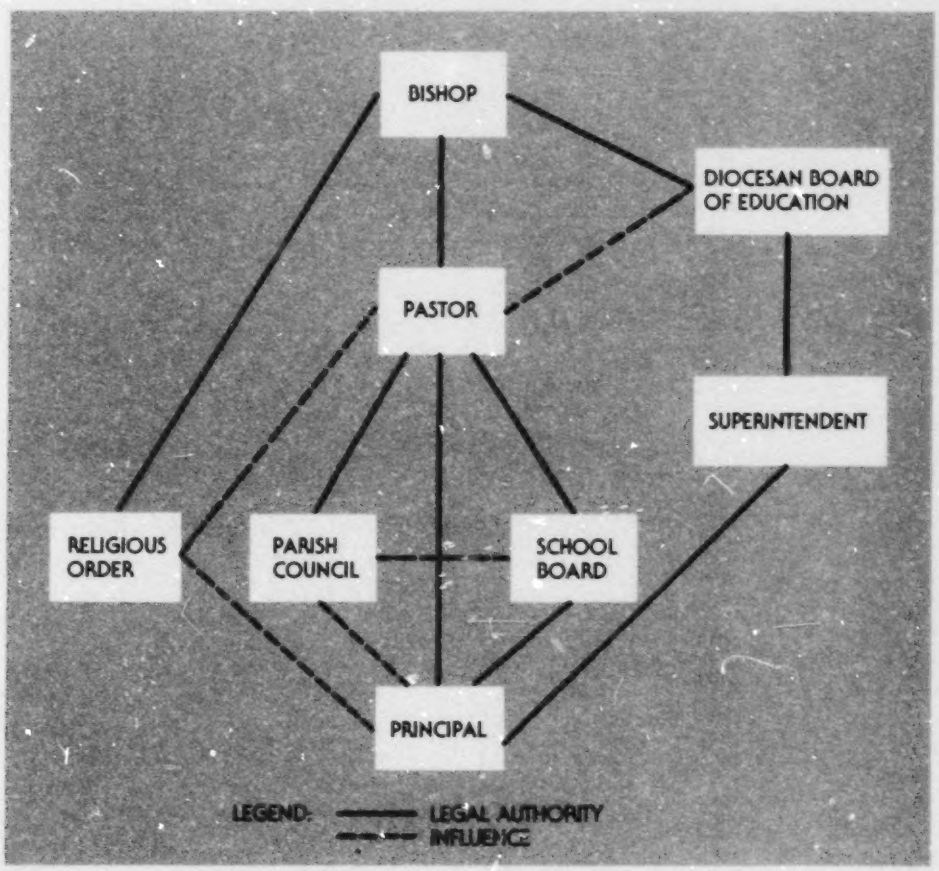


FIGURE 8.2
A Simplified Organizational View of the Governance Structure for a Diocesan School

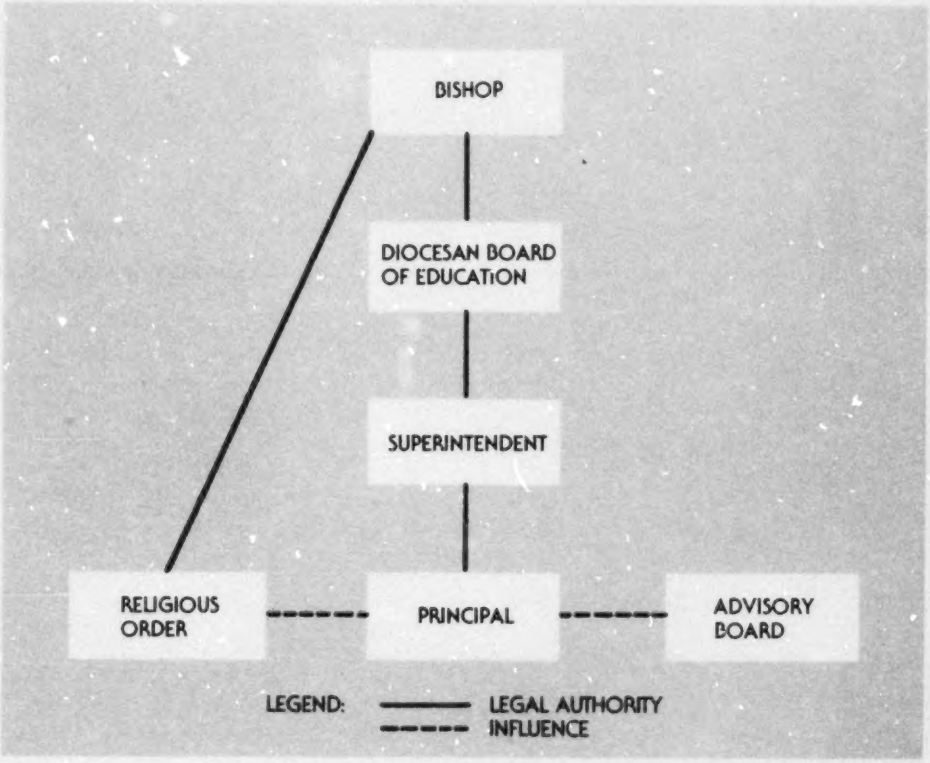
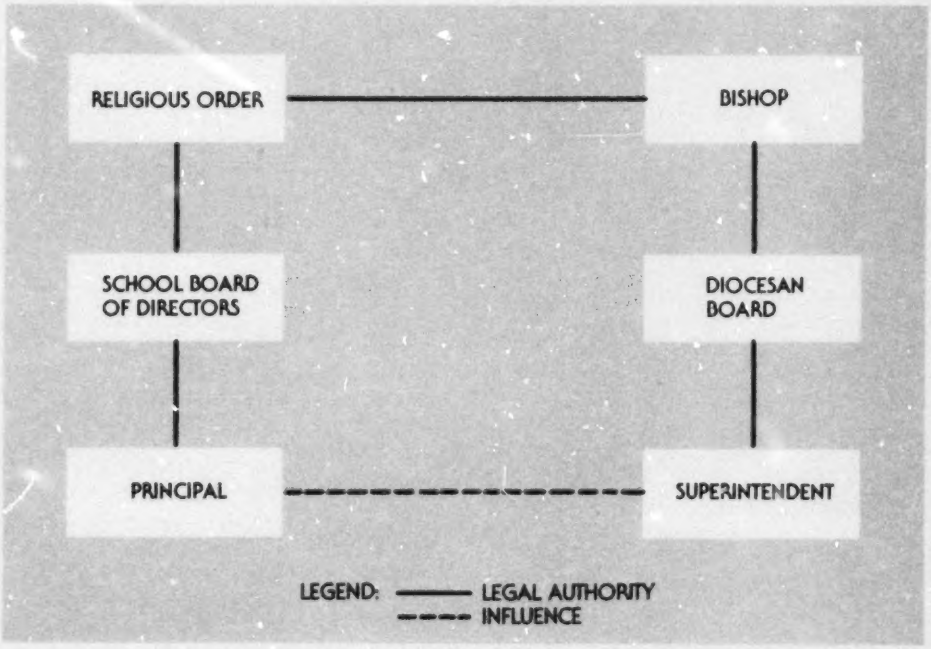


FIGURE 8.3
A Simplified Organizational View of the Governance Structure for a Religious Order School



highlight the basic organizational elements that would appear in virtually any diocese. They do not, however, reflect the full detail of the organization of any particular diocese.

The principal occupies the central administrative role in Catholic schools. This position requires expertise in many diverse areas: personnel, finances, community relations, curriculum and supervision, and Catholic leadership. The lean administrative staffs in most Catholic schools provide little support for the principal. As a result, this role can be quite demanding.

Individual Catholic schools, regardless of their legal structure, are quite autonomous. The principal thus acts as chief administrative officer for the school. Although limited to a single institution, the responsibilities involved are equivalent in range and nature to those of a public school principal and superintendent combined. The Catholic school principal bears responsibility for financial management, development, fund raising, public and alumni relations, faculty selection and supervision, student recruitment, and in many cases, discipline and instructional leadership. The principal must also maintain amicable relationships with the diocese, the neighboring parishes, the religious order, and the local community.

The daily routine of Catholic school principals makes many demands on their skills and energies. This can be seen most clearly in a brief portrayal of a typical day in the life of Father Kevin O'Leary, the principal at St. Cornelius High School in Cleveland.

Father O'Leary has responsibility for over 900 students and 60 faculty spread over three campuses about three miles apart. O'Leary normally arrives in his office at 8 A.M. after offering Mass at a nearby convent. His first task of the school day might be to talk with several parents about some discipline problem that involves their child—anything from alcohol consumption on school property to classroom misbehavior or truancy.

A substantial part of the remainder of the morning might be spent in a series of short conferences about a variety of administrative matters. These span concerns from course scheduling and collecting delinquent tuition to problems with the maintenance of school buses.

For part of the day, Fr. O'Leary walks the hallways and spends time in the cafeteria greeting students as they pass, occasionally stopping to engage in informal conversation. He might ask a student about her progress with school work with which she has had some difficulty, stop a member of the basketball team to engage in friendly banter about last night's game, or take a student aside to inquire about "how things are at home." This is also a time for informal conversations with teachers about how their classes are progressing. He might visit a class for ten or fifteen minutes as part of his observation routine. These daily walks give him a feel for what is happening within the classes and, more generally, around the school.

Much of the afternoon is taken up with a variety of desk work that includes returning telephone calls, responding to written inquiries, and perhaps spending a few moments jotting notes on an idea for his monthly newsletter to parents. Late in the afternoon, he might have scheduled a meeting or two: more conferences with parents, possibly a meeting with department members working on curriculum revisions, or perhaps a discussion with the school's neighbors who have complained about students playing their radios too loudly and cutting through the neighbors' yards on their way to school. He might conclude his afternoon with a visit to the athletic fields and the gym, observing the students practice, talking to coaches, and watching an athletic contest if one is scheduled that day.

On most days, Fr. O'Leary's schedule extends well into the evening. The agenda might be a dinner meeting in the diocesan office downtown to discuss some pending

matter with the superintendent. On many nights, fund-raising activity is the main concern. On other occasions, it is pastoral work—e.g., a visit to a funeral home or hospital to comfort families associated with the school community.

In talking about their roles, principals conveyed many images: community builder, instructional leader, financial and personnel manager, recruiter, reconciler, promoter, enforcer, and general morale builder. Most of the principals indicated that their primary concerns were the academic and religious programs of their schools. They particularly stressed the importance of selecting personnel who are both academically well qualified and whose personal values are consistent with those of the school. As one of the principals stated:

> I look for people who have a strong academic background, are interested in working with teenagers, and are supportive of the philosophy of the school. I also look for teachers who are willing to get involved with students in coaching and other after-school activities.

Although most of the principals in the sample schools had an assistant, the administrative structures are generally quite slim. In part, this is due to the relatively small size of most Catholic secondary schools. It is also due to a conscious decision to control costs. As a result, principals perform many tasks that would be spread out in larger organizations—chairing committees, recruiting students, and directing parents' clubs, in addition to administration. Two of the principals in the schools we visited even managed to teach a class section.

This was one area where school size worked in the principal's favor. In larger schools, the principal was likely to have several assistants. The most stressed principals were those in the smallest schools who had to perform essentially the same number of functions as their counterparts in larger schools but with much less help.

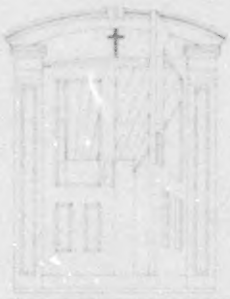
Historically, religious orders have provided support services for the schools in which their members taught. These services have contracted in the past twenty years as a result of the gradual retrenchment of the religious orders. In an attempt to fill this growing breach, diocesan offices of education have expanded their role. The resources here are also limited, and these offices are hard put to meet the full range of services schools need.

Since the 1960s, the responsibilities of diocesan superintendents and diocesan central offices have changed considerably. After the school-building boom of the 1960s, dioceses faced huge capital debts, mounting operational deficits, and became increasingly reluctant to build more schools. These financial pressures led dioceses to move in the direction of ceding financial responsibility to already existing schools. As some of these closed and the system contracted, the emphasis in diocesan offices of education shifted to providing support services that religious orders had previously supplied.

Both elementary and secondary principals expressed the need for centralized services such as leadership training for administrators and boards, legal and financial advice, assistance on curriculum matters, and increased opportunities for communication between elementary and secondary schools. The diocesan central offices, however, generally have small staffs and limited resources, which constrain their ability to provide the number and range of services requested. In one diocese with over 40,000 students, curriculum and staff development was handled by a single professional.

For many parish and diocesan schools, the diocesan office of education is the major source of professional support services in the areas of planning, development, programming, and evaluation. As religious orders continue to reduce their services to schools, the need for diocesan support seems likely to increase. Diocesan budgets in the sites we visited, however, are not expanding in response to these needs.

Nevertheless, the role of the diocese in the governance of Catholic schools seems likely to grow in the years ahead.



Religious orders continue to provide the vast majority of school principalships. Their presence in these positions clearly identifies to the general public the Catholic character of the schools and keeps administrative costs at a minimum. Although this mechanism has been effective in the past, it could disable the system in future years, particularly if religious orders fail to prepare lay administrators and boards to assume leadership in Catholic schools.

Some religious orders see their mission as one of providing leadership through such key roles as principal, department head, and school board members. Many have made the decision to keep their own religious personnel in the top administrative and board positions. This holds down administrative operating costs since religious staff generally return part of their salary to the school in the form of contributed services. Controlling costs allows tuition rates to be kept to a minimal level, which in turn allows schools to serve a broad social class of students.

The presence of religious staff in key administrative positions also serves to reassure parents and alumni that the school is Catholic. We heard several comments, from staff and particularly from parents, that highlighted this image problem: to those outside the schools, what is a Catholic school without religious staff?

The view of some religious orders about school governance, however, emphasizes short-range thinking at the possible expense of long-term solutions. In preferring to assign leadership positions to their own personnel, such religious orders are neglecting the essential task of preparing lay administrators and future Catholic school leaders. To continue these practices could be disastrous.

Similarly, we view the development of active independent lay boards as essential to the long-term health of Catholic schools. These boards can undertake several important missions, such as long-range planning and development efforts, and can generally provide a broad base of future support for the schools. Some schools have already moved in this direction and are well situated for the decade ahead. Others are struggling with the transition process. Unfortunately, some remain unaware of the issues we are raising.

Two of our sample schools illustrate the kind of problem that can result from adherence to this short-term strategy. Despite the existence of a lay board at St. Peter's, all long-range planning and institutional management had been directed by the religious order. Their departure in 1982 created a vacuum. The lack of experienced lay administrators and board members left the school in a vulnerable position. When we visited in the fall of 1982 and the spring of 1983, St. Peter's faced declining enrollment and financial problems without the guidance of experienced leaders. It was a troubled school facing an uncertain future.

At St. Frances', the situation appears stable. Just beneath the surface, however, are some very disturbing concerns. The school relies heavily on the expertise and resources of its sponsoring order. The order, though, has its own financial and

personnel concerns. Serious questions are being raised about its ability to sustain the school. In our view, this school needs to look to its alumnae, parents, and other interested persons in the community for expertise, leadership, and support. Unfortunately, little ground work for this has been laid.

On balance, religious orders that sponsor Catholic elementary and secondary schools face the same dilemma that religiously oriented higher education institutions have faced in the past. How can they preserve tradition and commitment to Catholic values while dealing realistically with changing times? How can they assure that, like many denominational colleges, they will not gradually slip away from their religious purposes to become secular institutions? There is always a risk in moving forward. Yet to stand still in this case means virtually certain demise.

Respect for and deference to members of religious orders have done much to shape the governance of Catholic schools. In the last 15 years, however, the more general conceptions about the Church and the nature of religious experience in which this attitude is embedded have undergone considerable change. This shift, combined with the declining numbers of religious staff and increasingly scarce resources, suggests that a new organizational model is needed for Catholic schools. The concept of colleagueship, which recognizes that personnel are the greatest resource of Catholic schools, offers an attractive alternative.

As mentioned in Section 4, some aspects of teachers' involvement in Catholic schools appear troubling. While teachers report that they have considerable authority in matters of curriculum and classroom management, they claim little knowledge of and influence over the schools' fiscal affairs. These responses are consistent with other data we collected. They indicate that most Catholic school teachers believe both that they are underpaid and that the school could afford to pay them more. The situation appears particularly problematic for lay persons who constitute approximately 75 percent of the teachers in Catholic schools but hold only about 27 percent of the principalships.[1]

These survey data results are perplexing to us. Although they suggest sharp organizational conflicts, we did not encounter such conflicts in our field research. Our observations and interviews suggest that this is due in part to the character of the work in these schools. Many lay teachers spoke with great affection about their feelings of kinship with religious members of the faculty, some of whom they may have admired as their own teachers several years earlier. They spoke of the religious staff as "good people," "dedicated to education," and "committed to the personal development of each student." And they respect the religious staff. As one teacher said: "The professional pride and teaching tradition of the sisters at this school are incredible. I feel like I can breathe it in the classrooms and hallways." Such positive perceptions about one's fellow teachers and the value of one's work can diminish the impact of material inadequacies.[2]

These comments from the lay faculty suggest that religious members are held in some reverence and thus are accorded deference because of the depth of their commitment to teaching and to students' learning. This deference, however, is also grounded in traditional Catholic teachings, in which many lay faculty were inculcated. They emphasize a conception of the Church as interpreter of a received truth and a view of religious experience that focusses on the vertical dimension—a personal relationship with a Supreme Being. In discussing elementary school governance we noted a pattern of deference towards the pastor. This might be broadened at the secondary level to encompass religious staff more generally.

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1. A *National Portrait of Catholic Secondary Schools, Preliminary Report, Phase I, op. cit.*, p. 2.
2. A very readable form of this argument can be found in Thomas Peters and Robert Waterman, *In Search of Excellence*, New York: Harper and Row, 1982.

But there is also a disabling quality in this attitude that can produce institutional passivity. The religious orders built, staffed, and have provided for these schools throughout their history. They have owned them in the fullest sense of the word. But recent trends—chiefly diminishing numbers of religious staff and declining resources—mean that the reach of the religious orders will inevitably shrink. Further, the intellectual foundations that historically have underpinned the enterprise have begun to shift. The last 15 years have witnessed the emergence of new conceptions of the Church as community and a view of religious experience that gives vitality to its horizontal dimension, a concern for humanity.

The combination of the human and fiscal constraints and the changing perceptions about the purposes and nature of Catholic schools dictate a move towards colleagueship as the organizing principle for Catholic schools. For despite the constraints, Catholic schools have one clear strength: the dedication and commitment of the faculty and staff. The concept of colleagueship builds on this strength. Moreover, some would argue that such a move would also serve the concern for equity—that those who make sacrifices to support the system deserve voice in its governance.

Robert Newton has quite perceptively noted the difficulties that religious and lay faculty will face in implementing the notion of colleagueship within Catholic schools.[3]

> It will not be an easy transition. The challenge to both laity and religious [staff] involves a significant change in their roles and behavior. Religious [staff] and clerics . . . must see themselves as partners, rather than the primary recipients of the vocation of teaching. Religious communities and diocesan offices will have an especially hard time adjusting to this new role. The communication networks within the clerical religious world are firmly established. . . . To begin to treat lay persons as leaders in Catholic education on more than a token basis will require significant adaptation on the part of clergy and religious [staff].

Yet without this adaptation, the future for Catholic schools looks very uncertain.

3. See Robert Newton, "Lay Leadership in Catholic Schools: Dimensions and Dilemmas," *New Catholic World*, March/April, 1981.

CONCLUSION

We began by describing our findings as a story of much goodness, but also of some tensions and two deep-seated problems. The last two sections identify these problems: finance and governance. It is clear the limited resources in some schools detract from their quality and seriously jeopardize their future. In the most concrete terms, there is a need to upgrade instructional facilities, such as science labs and computers. There is also a need to improve teacher salaries in order to maintain a stable faculty core. In more abstract terms, Catholic schools run the great risk of losing their sense of mission. The concern for the academic and spiritual tradition of the school can become secondary to the school's desperate fight for survival. As religious orders relinquish sponsorship of schools and the rapid turnover in lay faculty continues, who will remain to interpret and teach the traditions and to carry on the mission?

It is equally clear that the pressure on fiscal resources will grow in the years ahead. The number of institutions affected is likely to increase. The current sources of financial support for Catholic schools are not adequate to maintain them in the future. The declining subsidies from religious orders, parishes, and dioceses, which result from the more general social, economic, and demographic factors affecting the American Catholic Church, are a major problem confronting Catholic schools. For some schools, particularly those with large proportions of poor and minorities, these fiscal problems are especially serious.

While it might seem curious to some, we see governance issues to be equally significant. In part, governance concerns relate directly to financial matters—e.g., the need to establish independent boards of directors to assist in institutional planning and development. But governance concerns also have an internal component: what role should be accorded the growing lay faculty? In the quiet transformation of Catholic schools to lay institutions, this issue is not yet addressed fully. Canon law notions of authority and religious obedience seem an inappropriate basis for the governance of these post-Vatican II schools; but so do the adverserial labor-management models that are prominent in much of the public service sector.

Teachers are the great strength of Catholic secondary schools. Their extended work day, diverse academic and co-curricular involvements, and broad investment in the school and the welfare of its students indicate uncommon dedication. We observe this in our field sites and see ample testimony to it in the national data from *High School and Beyond*. It would be a tragic loss were this commitment and dedication to be dissipated because Catholic leadership lacked the vision to reach beyond their present horizon and cultural bounds concerning the appropriate means for organizing and managing faculty concerns.

In addition, there are visible tensions within the schools over how they are Catholic, and as a result, whom they should serve. The transformation of the school from Catholic in a narrow, orthodox sense to an ecumenism which reaches out to minorities and non-Catholics comes at a time of considerable turmoil within the Church and the larger society. Inevitably, there are different views and conflicts

among these views. Within the schools we visited, however, these tensions seem productive. The conversations were open and lively with little cynicism. This signals an institutional vitality in which committed individuals seek to preserve what is of worth from the past while recognizing the need to reinterpret tradition in bringing meaning to contemporary problems.

Neither the problems nor tensions mentioned above should obscure the fact there is much goodness in the Catholic schools we studied. There is a consensus among teachers, students, and parents about the purposes of the school. This mutual commitment creates a social contract that has pervasive influences. For teachers, it means a commitment to both a professional role and a personal stake in the school and in the lives of its students. For students, it means a commitment to actively engage in the instructional process and the life of the school. For both teachers and students alike, it is a social involvement bound by mutual respect. The overall effect is an environment conducive to learning, where learning occurs in both the academic and moral spheres.

On the instructional side, there is the tradition of a rigorous academic core curriculum. By concentrating efforts here, Catholic schools are able to accomplish a great deal with very modest resources. More importantly, however, our research indicates there are significant social and educational consequences to this policy. In particular, a major mechanism by which social class differences are translated into academic differences is greatly constrained.

But the consensus of values extends beyond academic goals to a broad set of purposes for the school: there is ample space for concerns about building community, human relations, social justice, and racial harmony. It is unabashedly value-oriented, grounded in a set of beliefs about the worth of each individual and a world view that proclaims the meaning of life encompasses more than self interest in a material world as we know it here and now. It is the orientation toward personal goodness that binds together the culture of the Catholic school and ultimately makes it work as a social institution.

In closing, our research joins a modest stream of other work that recognizes the positive character of the contemporary Catholic school. In a real sense, this is the best of times for Catholic schools. Yet, it is also a time of concern and surely more change. Catholic schools must continue to adapt while maintaining a commitment to their academic and spiritual traditions. Disciplined inquiry can play a role in such an environment. While social research rarely provides solutions - there is no mechanical substitute for good judgement - it can, however, catalyze discussion and encourage a more reflective educational policy and practice. It is in this spirit that we offer our work for your consideration.

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